2011

The relationship between cognitive moral development and attitudes toward cheating among preservice and in-service high school teachers

Michael G. Glaser

The University of San Francisco

THE RELATIONSHIP BETWEEN COGNITIVE MORAL DEVELOPMENT AND ATTITUDES TOWARD CHEATING AMONG PRESERVICE AND IN-SERVICE HIGH SCHOOL TEACHERS

A Dissertation Presented
to
The Faculty of the School of Education
Department of Leadership Studies

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

By
Michael Glaser
San Francisco
May 2011
UMI Number:

Michael Glaser
THE UNIVERSITY OF SAN FRANCISCO
Dissertation Abstract

The Relationship Between Cognitive Moral Development and Attitudes Toward Cheating Among Preservice and In-Service High School Teachers

This study examined the relationship between moral reasoning and attitudes about cheating on tests, essays, and other assignments. Moral-reasoning levels were based on the Defining Issues Test (DIT-1), a measure of principled moral reasoning. Cheating prevention and punishment-attitude scores were calculated based on the Cheating Management Questionnaire (CMQ), a measure of teacher attitudes about cheating. Of teachers, 146 in-service high school teachers and 16 preservice high school teachers participated in the study.

T-tests were calculated between the two subgroups on moral reasoning, academic-cheating prevention, and academic-cheating punishment. Intercorrelations were calculated between the 3 measures for the in-service teachers. Supplementary analyses on the in-service-teacher group were conducted using demographic variables.

Several noteworthy findings of this study were that female teachers scored higher than male teachers on moral reasoning, and demonstrated more stringent attitudes about implementing cheating-prevention and -punishment procedures. The differences on moral reasoning and prevention were statistically significant. The in-service-teacher group scored higher on the DIT than the preservice-teacher group. A 9.24-point difference was observed between the two groups. In addition, the in-service teachers showed more stringent attitudes toward punishing cheaters than did preservice teachers.

Future studies can build on these findings by disaggregating the DIT and CMQ data according to school districts and by considering the relationship between moral-

reasoning levels and variables such as class size, teacher-to-student ratio and socioeconomic status. The significance of the study and implications for policy and practice are also discussed.

This dissertation, written under the direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the Faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Education. The content and research methodology presented in this work represents the work of the candidate alone.

Michael Glaser_____ Candidate	June 18, 2011
Dissertation Committee	
Patricia Mitchell, Ph.D._____ Chairperson	June 18, 2011
Betty Taylor, Ph.D. _____	June 18, 2011
Brian Gerrard, Ph.D. _____	June 18, 2011

Acknowledgements

I would like to thank my committee, Dr. Brian Gerrard, Dr. Betty Taylor, and Dr. Patricia Mitchell for their expert guidance and also for their patience. I would also like to thank Dr. Ellen Herda for introducing me to an extraordinary world of thinkers who bring a smile to my face. I would also like to thank two scholars, Dr. Deborah Nolan of the University of California, Berkeley, who provided me with expert insight, and Dr. Donald McCabe of Rutgers University, who gave me a call to tell me that I was on the right track. Most of all, I want to express my heartfelt thanks to Dr. Patricia Mitchell, who told me that things were going to work out fine and I believed her. She has been immensely insightful and supportive throughout the process and I appreciate it. And finally, I want to thank my wife, Yoko Oda, for living with me.

Table of Contents

List of Tables

Page

List of Figures

Page

Chapter I

The Research Problem

Introduction

Students, teachers, administrators, economists, historians, scientists, and other academics are members of an educational community known as *the academy*. This community establishes standards based on common goals that advance knowledge that is beneficial to society (Plato, trans. 1997). Since the time of ancient Greeks, education has been understood as a means of ordering and enriching the social domain and the life of its citizenry. Plato spoke of political systems as a means to engender intellectual, moral, and civic education. Plato rhetorically asked, "What great benefit (does) the state derive from the training by which it educates its citizens, and the reply will be perfectly straightforward. The good education they have received will make them good men" (Plato, trans. 1997). Dewey (1916), in the opening chapter of the classic work *Democracy and Education* spoke of education in the broadest sense, as a necessary component in the process of bringing "social continuity of life" (p. 3). According to Dewey, education endeavors to broaden understanding while promoting the importance of social rules, values, and standards of behavior. By maintaining integrity in the academic process, the academy can pursue a central facet of its mission: to introduce and reinforce the importance of honesty when producing and discussing academic work.

The cornerstone of authentic learning in all academic disciplines is honesty. Academic honesty is essential to good teaching and learning. Teachers have traditionally been held to the high standards of moral and professional conduct. To this day, children are routinely entrusted to the care of teachers. Teachers, in turn, are expected to hold

their students to high standards of moral and academic conduct. Beginning early in the colonial period, American schools incorporated a doctrine known as *in loco parentis* from British common law. Latin for "in the place of a parent," *in loco parentis* is a legal doctrine that extends parental status to the schoolteacher. During the mid-19th century public school curriculum deemphasized moral and religious education. Although the secularization of public school took hold, it did not diminish the teachers' responsibility to establish and maintain high standards of academic conduct.

The broader notions of *character education* and *classroom management* provide a context for the moral aspect of professional responsibility. Two exemplars from the literature serve to position these ideas. The first is Lickona's definition of character education as, "the deliberate effort to cultivate virtue … [those] affirmed by nearly all philosophical, cultural, and religious traditions: wisdom, justice, fortitude, self-control, love, a positive attitude, hard work, integrity, gratitude, and humility" (Lickona, 2004, p. xxv). The second is the link between classroom management, classroom instruction, and morality. Campbell (2008) wrote,

> Ethical teachers should be moral agents and moral models, not moralistic activists. Their professional responsibility in this moral sense is an immediate and direct one that honors the public's trust in them and does not stray beyond the boundaries of their mandate. It is simply to hold themselves accountable for how they treat the students in their care and how they cultivate for them schooling experiences … that are reflected in the best of societal values, norms, and laws and that parallel most parents' reasonable expectations of public schooling. (pp. 274–275).

This view of the teacher's responsibility describes an activity that promotes good conduct by modeling good behavior and by creating an environment that supports academic and emotional learning. In that context, student behavior is managed in two distinct ways. The more general is the process of socialization and conditioning that promotes good behavior; the second is conditioning that discourages aberrant behavior by leveling punishments against students when they misbehave (Brophy, 1986; Kounin, 1970). Effective classroom managers develop trusting relationships with their students. They communicate explicit connections between cheating infractions and the consequences that follow. This involves the implementation of disciplinary procedures with fairness and consistency (Brophy, 1986).

Effective cheating management is essential at the high school and college levels. By all available measures, incidents of cheating are on the rise and reaching unprecedented levels in the United States (Josephson, 2010; McCabe & Trevino, 1993). The Josephson Institute's Survey on the Ethics of American Youth 2010 reported that 64% of 43,000 high school students in public and private schools admitted to cheating on a test in the year prior to taking the survey. More than 1 in 3 said they used the Internet to plagiarize an assignment. According to the Center for Academic Integrity (2011) the Internet has made cheating more convenient. Responses to Josephson's survey indicated that students didn't know how to use the Internet for academic purposes, and that in some cases they don't care to learn (Josephson, 2010). There is a growing concern that as the cost of technology decreases and information access increases, the problem of academic dishonesty will spread ever further, sullying the notion of copyright protection and the sanctity of original work.

Purpose of the Study

The current study focused on the growing problem of academic dishonesty. It investigated high school teachers' belief regarding the seriousness of the problem and their approach to countering it in the classroom. The purpose of this study was to explore preservice and in-service high school teachers' cognitive moral reasoning levels and how those levels relate to (a) the importance that they attribute to the problem of academic dishonesty, and (b) their readiness to take proactive and reactive measures to counter the problem. Exploring the relationship between reasoning levels and beliefs about the problem of cheating and how to deal with it compliments the existing literature and provides researchers, policymakers, and faculty members with insight into the relationship between teachers' moral reasoning and their attitudes about dealing with cheating behaviors.

Theoretical Rationale

This research draws on Kohlberg's cognitive-moral-development theory as its theoretical foundation. For over half a century Kohlberg's theory, in various forms, has stimulated research about morality and moral development (Cummings, Dyas, Maddux & Kochman, 2001). Kohlberg's work is based on Piaget's (1932) study on the development of moral reasoning in children. In the 1950s, when Piaget was becoming popular among American psychologists, the dominant view of moral development was behavioral. Moral development was seen as the process of adapting to social norms and adopting cultural mores. *Conformity* was the catchword of the time. Piaget challenged the idea that ethics were the result of external influences (Durkheim, 1925/1973). For Piaget, the first type of morality seen in young children was a morality of constraint. Children

behaved in ways devised to avoid punishment. As children developed more autonomy they transitioned into a morality of cooperation and began to see rules separate from adult authority. Through interaction with peers, children grew into a social system where rules were viewed as mutually beneficial. Social and cognitive skills enabled children to abide by internalized rules. They began to base their judgments on intention. For example, when Child A compared a boy who broke several dishes while trying to help his mother, to a boy who broke only one dish while trying to steal cookies, Child A considered the first boy's action more reprehensible due the amount of damage done. An older child begins to judge wrongness in terms of the intentions underlying the act (Piaget, 1932, p. 137).

Kohlberg (1969) adopted four key components of Piaget's theory of morality development: (a) Like Piaget, Kohlberg focused on cognition, the thinking process, and representations by which people construct reality; (b) Like Piaget, Kohlberg assumed that there would be stages in moral development; (c) Like Piaget, Kohlberg posed ethical problems to his subjects and collected data on their responses; (d) Like Piaget, Kohlberg looked for differences in the moral problem solving strategies used by people at different ages (as cited in Rest & Narvaez, 1994, p. 3). Kohlberg (1981, 1984) identified with the Kantian deontological notion that ethical systems evaluated morality based on the presupposition that certain truths exist in an external moral realm. Kohlberg's early research (1958, 1967) focused on moral development in student populations. Kohlberg combined studies on cognitive and moral development when considering ethical decision making. In Kohlberg's framework, growth in cognitive development creates a state of readiness necessary for moral development (as cited in Walker, 1988).

Implicit to Kohlberg's model is the idea that ethical reasoning moves along a developmental pathway from a less developed moral position to a more sophisticated one (Kohlberg , 1969). The progression from lower to higher stages indicates that an individual's ability to make ethical judgments becomes less dependent on outside influences. Individuals with a stronger internal locus of control are likely to have higher levels of moral development, and are less likely to engage in unethical behavior. Kohlberg and other cognitive developmental theorists depict moral reasoning as a logical process through which an individual conceptualizes and evaluates moral conflicts—usually referred to as moral judgment (Colby & Kohlberg, 1987; Piaget, 1932; Rest, 1986). One way of understanding the developmental progression of moral judgment is in terms of the relationship between the self and society's moral rules and expectations (Colby & Kohlberg, 1987). Moral perspective progresses from rules based on social expectations to rules based on self-expectation. Not all adults progress to the perspective where the self is differentiated from the expectations of others and able to define moral values in terms of self-chosen principles, where reciprocity and cooperation involve diverse points of view.

In an early study Kohlberg (1958) tracked the progress of 58 teenagers, interviewing them in 3-year cycles for a 12-year duration. Based on the boys' responses to hypothetical moral dilemmas, Kohlberg delineated a sequence of phases of moral development that evolve, during periods of cognitive disequilibrium and contradiction, into stages that progress from childhood to adulthood. The levels and substages are used as a framework that delineates how people think about moral dilemmas. Each new stage is an elaboration of the previous one, "which is what fixes the sequence of the stages"

(Rest & Narvaez, 1994, p. 3). As moral reasoning advances, the basis for making moral judgments advances from egocentricity to reciprocity and a support of universal human rights. At the highest level, moral judgments depend on abstract, formal reasoning and the ability to consider moral issues from diverse perspectives. As people pass through the stages they become increasingly independent of outside influences. Their locus of control shifts from the external to the internal.

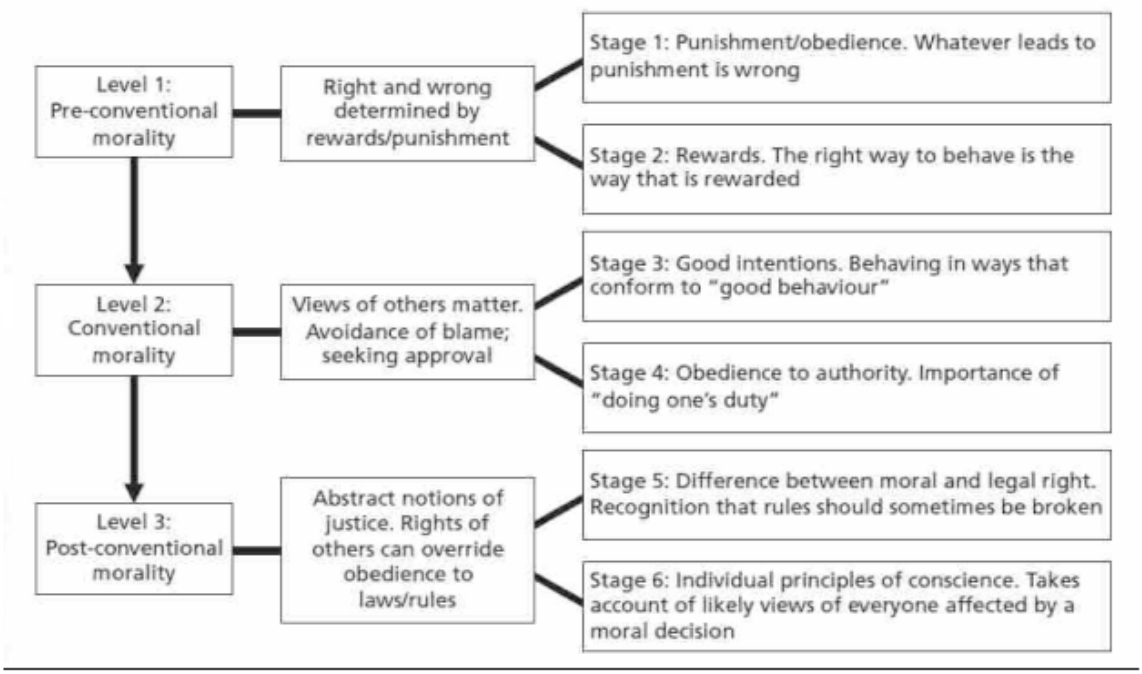


Figure 1. Kohlberg's three levels and six stages of moral reasoning.
From Stages of Moral Development, by L. Kohlberg, 2001, retrieved from http://www .integratedsociopsychology.net/stages-moral_development.html. Permission to reproduce granted by Psychology Press Ltd.

Level I—Preconventional Morality

Level 1, the preconventional, is characterized by externalized morals. Children at this level are

> responsive to cultural rules and labels of good and bad, right or wrong, but interpret these labels either in terms of hedonistic consequences (punishment, reward, exchange of favors) or in terms of the physical power of those who enunciate the rules and labels. (Kohlberg & Hersh, 1977, p. 54)

The preconventional level consists of Stage 1, the punishment and obedience orientation in which the physical consequences of action determine goodness or badness, regardless of the meaning or values of the consequences. Stage 2 is referred to as the instrumental-relativist orientation in which the right action consists of that which satisfies one's own needs and on occasion, the needs of others. In Stage 2, people might personalize a decision not to cheat as, "I won't cheat because I'll be punished if I do." Gradually, a positive self-interest is realized and they frame the issue as, "I will cheat to get a better score."

Level II—Conventional Morality

The conventional level is a shared viewpoint of the participants in relationship to a group (Kohlberg, 1984). This level is characterized by quasi-internalized morals. The level consists of Stages 3 and 4, where moral conflicts are viewed and resolved in social terms rather than in individual terms. Stage 3 is referred to as the interpersonal concordance or "good boy–nice girl" orientation where the value of behavior corresponds to that which pleases others and is approved by them. Stage 4 is characterized by "law and order" obedience to authority and the maintenance of the social order. Reasoning at this phase is, "I won't cheat because if I get caught my parents will be ashamed of me." This level of understanding corresponds to a broader social understanding of right and wrong, "I won't cheat because if everyone cheats, it isn't fair to me or anyone else."

Level III—Postconventional Morality

The postconventional level consists of Stages 5 and 6, where values and ethical beliefs are internalized. At this level, which is rarely fully obtained, moral judgments are textured by the ability to consider moral issues from diverse perspectives. Social rules are viewed as relative and situational. In Stage 5 right actions tend to be defined in terms of individual rights and standards, which have been critically examined and agreed upon by the larger society. In Stage 6, the universal-ethical-principle orientation, right is defined by the decision of conscience in accordance with ethical principles that appeal to logical comprehensiveness, universality, and consistency. Self-chosen ethical principles at this level indicate an ability to construct ethical frameworks and belief systems apart from conventional social norms. Trevino and Youngblood (1990), link independent moral development to a decrease in unethical behavior,

> More adept individuals at ethical reasoning are more likely to make judgments based on principles they chose as opposed to those gained through peer pressures and other outside influences. Individuals with higher levels of moral development are less likely to engage in unethical behavior. (p. 22).

Kohlberg's framework is associated broadly to the field of normative ethics, the branch of philosophical ethics that investigates how to act morally. Kohlberg's work is also associated with descriptive ethics to the extent that human beings' actually develop morals through the descriptive analysis of responses to open-ended questions. Following Rawls (1971), Kohlberg (1984) argued that moral judgment is grounded in *justice reasoning*—that individual moral action cannot be defined outside of a broader social context.

Kohlberg's theory has been criticized from a variety of vantage points. Walker Pitts, Hennig, and Matsuba (1995) suggested that Kohlberg's model is no longer a progressive force. They argued that the type of reasoning measured in Kohlberg's moral dilemmas differs from the reasoning that occurs in real-life situations. If that is the case, measuring the way people think about actual, everyday moral situations based on Kohlberg's assessment tool would produce skewed results. Other scholars have criticized Kohlberg's theory as being exclusive to liberal, Western concepts of individuality (Miller & Bersoff, 1992). Flanagan and Jackson (1987) viewed the theory as being narrowly focused on the singular concept of justice. Joy (1986) implied that Kohlberg's interpretation of Piaget's notion of justice was too narrowly defined. Leming (1978) reported that lower levels of reasoning were activated to solve practical dilemmas when compared to solving hypothetical dilemmas. They claimed that these results showed that Kohlberg's theory was better applied to hypothetical situations.

Kohlberg's theory (1969) was developed based on research using male participants; Gilligan argued that women and men have different moral-reasoning skills that affect their attitudes and interactions with others. Gilligan contended that Kohlberg's justice ethic was biased against care, the dominant ethic for women (Gilligan & Attanucci, 1988), Gilligan (1977) stated,

> In [women's] conception, the moral problem arises from conflicting responsibilities rather than from competing rights and requires for its resolution a mode of thinking that is contextual and narrative rather than formal and abstract. The conception of morality as concerned with the activity of care centers moral development around the understanding or responsibility and relationships, just as

> the conception of morality as fairness ties moral development to the understanding of rights and rules. (p. 19).

Rest and Narvaez (1994), neo-Kohlbergian scholars proposed an expanded model of moral judgment based on Kohlberg's theory. Rest's theory is based on the premise that people at different stages of development interpret moral dilemmas differently. Rest argued that Kohlberg's levels and stages are not indicators of an abrupt separation between individuals, or groups of individuals, at different developmental levels. Rather, the stages are "ways of organizing cooperation among individuals" (Rest & Narvaez, 1994, p. 8). The stages are seen as underlying conceptions that are tacitly held; they are a basic way that individuals respond to and negotiate around ethical problems. Rest and Narvaez explained:

> We assume that the conceptions of cooperation are deep structures, that they are among the individual's fundamental categories for interpreting the social world … [that] the conceptions of cooperation underlying the stages are *default schemas*—that is, they are the spontaneous and natural ways that people make sense of social situations. (emphasis in original, Rest & Narvaez, 1994, p. 8)

Rest's schemas follow a progressive developmental pattern but allow for a more gradual transition across the range of moral development. In the neo-Kohlbergian model, the schemas are: (a) Personal interest, which corresponds to Kohlberg's Stages 2 and 3, (b) Maintaining norms, which corresponds to Stage 4, and (c) Postconventional thinking, which corresponds to Stages 5 and 6 (Rest, 1986; Rest, Narvaez, Bebeau, & Thoma, 1999 1986). The schemas are represented as "shifting distributions" that cluster around the stages (Rest et al., 1999).

Bedrock schemas have been developed as a way of understanding moral judgment (Rest et al., 1999). The three schemas are personal-interest schema, maintaining-norms schema, and postconventional schema.

1. Personal-interest schema describes individuals lacking in sociocentric perspective. Decisions are based primarily in the personal stake of the decision maker, stressing notions such as survival and "getting ahead" (Narvaez & Bock, 2002). Specific to education, this describes teachers striving for learner conformity with little willingness to make adjustments for individual needs.
2. Maintaining-norms schema signifies an increase in an individual's ability to recognize societywide cooperation. It emphasizes rules that are clear and consistent and apply to everyone. The social system is imperative (i.e., the hierarchical nature of a school) along with maintaining the established norms.
3. Postconventional schema is based on four specific components:

   (a) the primacy of moral criteria;

   (b) the notion that there are idealized ways for humans to interrelate;

   (c) ideals are both shareable and open to justification and scrutiny; and

   (d) there is recognition of full reciprocity of social norms.

   Postconventional schema is associated with teacher judgment, such as viewing curriculum from multiple perspectives and considering the moral implications of instructional choices (Johnson, 2008, p. 431).

Rest (1979) and other cognitive scientists argued that Kohlberg's method of eliciting open-ended self-reported explanations is limited to the subject's ability to

construct verbal arguments. As a result, Rest (1979) devised the Defining Issues Test (DIT), a psychometric instrument based on Kohlberg's moral-stage typology to test moral cognitive reasoning. The DIT calls on schema and elicits beliefs and opinions at different stages of development.

Background and Need for the Study

Plagiarism has a long and colorful history. The etymology of the word plagiarism, meaning *literary theft*, derives from the English word "plagiary" meaning "one who wrongfully takes another's words or ideas" (Park, 2002). Differentiating between influence and plagiarism can be a murky and difficult pursuit. It is said that Emerson, who aspired to compose purely original work, conceded the fact, as he quipped, "All my best ideas were stolen by the ancients" (Park, 2010, p. 43). Copying the words of another is probably as old as writing itself, but until the advent of printing presses and publication, it remained a minor editorial concern. At the beginning of the 17th century the Elizabethan playwright, Johnson, used the word *plagiary* to denote taking another's work for one's own. Plagiarism increased as more works were published and widely read. During the mid-18th century copyright laws were instituted and formal charges were exacted against plagiarists by the end of that century. In the succeeding 2 centuries plagiarism and an array of other fraudulent scholarship became commonplace.

In 1964 sociologist Bowers published the first in-depth and far-reaching study on academic misconduct. Bower's study investigated cheating behavior among 5,000 college students on 99 campuses and reported that 50% of those surveyed had engaged in some form of academic misconduct since enrolling in college. Since Bower's groundbreaking work, many studies have confirmed an increase in cheating on tests,

fabricating research, and reusing academic documents (McCabe & Trevino, 1993). In a longitudinal study, McCabe and Bowers (1994) recorded a dramatic increase in self-reported cheating among undergraduate college students. Those results were confirmed in a concurrent longitudinal study conducted by Diekhoff et al. (1996), who found similar trends in cheating between 1984 and 1994.

The increase in cheating is being aggravated by easy information access on the Internet. Internet use is changing the way that people read and think about information. It appears that frequent reading on the Internet may be interfering with the ability to concentrate on traditional print material. As a result, an easier sort of plagiarism is taking hold. Students can easily "cut and paste" products. This new order of plagiarism can be accomplished without opening a book.

Examples of old and new plagiarism are listed in Table 1.

Table 1

Characteristics of Old and New Plagiarism

Old plagiarism	New plagiarism
Generally required human contact to acquire materials	Generally does not require human contact
Material copied from a hardbound source	Material copied or downloaded from electronic sources
Plagiarized from sources that were published and copyrighted	Plagiarized from sources that are not necessarily published and do not always claim copyright
Required acquisition of hard copies	Does not require hard copies
Required time and effort to search for content	Online searches require less effort and provide quicker results
Papers had to be handwritten or typed out	Materials are copy and pasted or downloaded and printed out

Although technology has offered new possibilities for teaching and learning, the digital landscape has posed serious ethical challenges to the academe. The phrase *unintentional plagiarism* refers to the segment of the student population that has inadequate knowledge of writing conventions and "plagiarize" due to a lack of skills or to a misunderstanding of the rules for documenting sources. The research process can be complicated and confusing; integrating external source material into written work is challenging (Wilhoit, 1994). According to Wilhoit, "Few students enter college fully understanding the relationship between plagiarism and the rules about quoting, paraphrasing, and documenting material" (p. 162). In many cases, students are academically unprepared to face the challenges of college-level writing.

The confusion about what constitutes plagiarism may result in part from the popularity of cooperative learning models. Cooperative learning, based on constructivist learning theory, provides a framework for learning as a collaborative experience. According to Dewey (1916, 1938), learning takes place when students work together in meaningful situations through task-centered interaction in social networks. In social-constructivist frameworks, learners complete tasks by critically manipulating ideas and synthesizing disparate notions into meaningful knowledge. In the process, groups of students become what Dewey referred to as a learning community based on democratic principles. In their work on the development of online learning communities, Palloff and Pratt (2005) likened critical collaborative learning to collectivist cultural models. In such a learning context the sharing of ideas comes naturally and students develop a more fluid notion of what is considered to be intellectual property. In classes that encourage collaboration, students work together in groups and help one another develop shared

concepts without critically assessing the ethical implications of mutual ownership of the work (West, Ravenscroft, & Shrader, 2004). Different cultural mores can also foster confusion about the ownership of academic work. Langlais (2006) referenced the case of China, where the notion of copyrights and intellectual property are more lax than in the West and cited cases where copying ideas directly from the text is considered ethically neutral. International students who are accustomed to differing academic conventions may not view plagiarism as an ethical issue at all (Josephson, 2010).

Addressing academic misconduct is the teacher's job. Reviewing written work and monitoring the classroom while proctoring examinations are considered job-related prosocial behaviors. Some instructors are determined to catch every transgression. Others are more lax, believing that the teacher's job is to plan, deliver, and assess; not to act as academic constable. Research on professional people in various fields revealed that individuals with higher moral reasoning demonstrated job-related prosocial behaviors**.** Examples of these finding include better clinical performance ratings in nursing, medicine, and dentistry (Thoma, 2006); preference for altruistic law applications in legal work (Landsman & McNeel, 2004); the likelihood of fraud detection by auditors (Ponemon & Gabhart, 1994); and the willingness to inform superiors of employee wrong-doing in law enforcement (Arnold & Ponemon, 1991). Ponemon (1992) conducted a cross-sectional, longitudinal study on the ethical reasoning levels of certified public accountants (CPAs). Ponemon found that individuals with higher moral-reasoning scores were more responsive to ethical dilemmas that are not well defined by external rules and ethical mores. Participants in that study were more likely to frame their ethical judgments independent of outside influences. Findings consistently linked higher levels

of moral decision making to ethical decision making. Richmond (2001) confirmed those findings in a study that measured the relationship between moral reasoning and ethical decision making in accounting students. Sixty-eight students were tested. Results indicated that students with higher incidence of principled moral reasoning were more sensitive to the ethical vagaries posed in vignettes about business dealings.

Studies have found similar patterns among educators. Chang (1994) found correlations between high levels of moral reasoning and good classroom practice. Chang suggested that teachers with higher moral-reasoning levels better accommodated different viewpoints and helped students understand the issue of academic honesty from multiple perspectives. Johnston and Lubomudrov (1987) reported that teachers with higher levels of moral reasoning were more democratic in their methods of exacting discipline by involving students in rule making and promoting understanding of the rules. According to their study, teachers with lower levels of moral reasoning viewed rules simply as a means of maintaining social order. Hilton (as cited in Rest & Narvaez, 1994) observed that teachers with higher reasoning scores were more friendly and garnered higher respect from students. Guthrie, King, and Palmer (2000) confirmed that notion, indicating that teachers who call on higher levels of moral reasoning were more likely to make decisions that supported the learning of underperforming students.

A number of studies on moral reasoning among teachers reported that both preservice and in-service teachers reason at lower levels than their peers in college and at the workplace. Diessner (1991) reviewed 30 studies that used the Moral Judgment Interview measure (MJI) and the DIT to measure teachers' moral-reasoning levels. The MJI employed open-ended interview questions to measure expressive moral reasoning.

The DIT measured receptive moral reasoning that is activated through rating and ranking responses to moral dilemmas. Diessner found that preservice and in-service teachers were reasoning at the principled level 50% or less of the time. Cummings, Maddux, Maples, and Torres-Rivera (2004) confirmed those findings. In a study that compared the moral-reasoning levels of a group of graduate teacher-education students with a norm group of other graduate students, the teacher-education student-group means were significantly lower than the norm-group means. Cummings et al. (2004) wrote, "This finding supports earlier studies that indicate lower moral reasoning scores of in-service and pre-service teachers" (2004, p. 10).

These findings are somewhat disturbing. It is generally understood that the teacher is responsible for maintaining academic standards. Teachers are expected to check student work for plagiarism, and to protect the reputation of the educational institution and the sanctity of original work. It is their job to teach and to safeguard learning. If teachers are reasoning at lower levels it may be the case that they are less concerned with promoting high standards of academic integrity. The present study investigated the relationship between teachers' moral reasoning, demographic variables, and attitudes about the problem of cheating; it queried whether differences in moral reasoning corresponded to more or less forgiving attitudes toward cheaters and cheating behaviors.

Research Questions

This study addressed the following questions.

1. What is the relationship between high school teachers' moral reasoning and their attitudes toward cheating prevention and cheating punishment?

2. Are there differences between preservice and in-service teachers' moral reasoning and their attitudes toward cheating prevention and cheating punishment?

Research Hypotheses

The above questions provide context for two hypotheses;

H_1: In-service teachers with higher moral-reasoning scores will be more likely to implement proactive and reactive measures to reduce cheating than in-service teachers with lower reasoning scores.

H_2: Preservice teachers with higher moral-reasoning scores will be more likely to implement proactive and reactive measures to reduce cheating than preservice teachers with lower moral-reasoning scores.

Limitations and Delimitations of the Study

Delimitations. Delimitations are those characteristics or elements selected by the researcher to define the boundaries of a study. Creswell (2003) discussed delimitations as the intentional narrowing of a population or other variables so they fit a specific research design. This researcher made conscious decisions to delimit the sample population, the types and variables to be considered, the type of data collection instruments to be used, and the type of theoretical framework to organize the data and interpret the findings.

1. The scope of the study was narrowed by the participation of teachers and teaching candidates who met certain criterion. Subjects were invited to participate based on their type of employment or their matriculation status in a teacher-education program. Candidates who met the other qualifications, but

were taking a leave of absence from school, were precluded from participation. The two subgroups of teachers that participated in this study were high school teachers who possessed a single-subject teaching credential in the State of California and preservice teachers who were enrolled in a single-subject teacher-credentialing program at an accredited university in the State of California. The target population of this study was further circumscribed to high school teachers in the Bay area of California and to graduate students at campuses throughout the state.

2. Three categories of variables were considered. They were demographic characteristics, moral-reasoning levels, and attitudinal scores.
3. These data were collected through test and survey questions designed to elicit ranked and rated responses on a Likert grid. The DIT and the Cheating Management Questionnaire (CMQ) were not designed to elicit rich descriptions or textured perceptions.
4. The theoretical interpretive framework was established by Kohlberg (1969, 1982) and evolved during the course of Kohlberg's career. The basic premise of Kohlberg's theory is that ethical reasoning moves along a developmental pathway from a less developed moral position to a more sophisticated one. The progression from lower to higher stages indicates that an individual's ability to make ethical judgments becomes less dependent on outside influences. The ability to generalize from this sample to the general population depends on the extent to which the present sample has representative characteristics of the larger population.

Limitations. As with all studies, this study was subject to limitations that can potentially bias conclusions drawn from the dataset. According to Creswell (2003), all studies have limitations including a decreased generalizability of findings due to potential weaknesses of the study design. Fraenkel and Wallen (2003) defined generalizability as the "degree to which a sample represents the population of interest" (p. 104). Three categories of limitations that may affect the outcomes of this study are listed below:

1. The sample population for the study was selected based on the criterion that they were confronting the problem of academic dishonesty in the high school classroom or that they would have to confront the problem after obtaining their teaching credential and gaining employment. The importance of these findings may be limited to preservice and in-service high school teacher populations in California.
2. The reliability of the data generated by questions on the CMQ, an instrument the researcher designed and developed, may limit the generalizability of these results. Although the CMQ was piloted, the testing conditions during the pilot were not identical to the testing circumstances during the general study. In the case of the pilot study, teachers who were acquainted with the researcher were given a hard copy of the questionnaire. Some of the questionnaire items were reworded or reordered as an outcome of the pilot study.
3. Social desirability bias, the overreporting of socially expected opinions, is the tendency of respondents to reply in a way they believe is acceptable to others. Due to the sensitivity of the subject matter, some of the respondents may have given intentionally misleading or socially desirable answers (LaBeff, Clark,

Haines, & Diekhoff, 1990). A similar possibility is that respondents may have given careless answers that did not reflect a well-considered opinion.

4. Rest (1979) disagreed with Kohlberg's (1969) position that the form and the content of moral arguments were distinct. Rest (1979) contended that the close relationship between assessing moral dilemmas and the content of the dilemmas itself might bias the subject's response on the DIT and was a limitation to that measurement.

Significance of the Study

With the prevalence of academic dishonesty persisting at considerably high levels, it is important to consider the teachers' ability to maintain academic honesty in their practice. The study is critical, largely because teachers seem to be expected to be capable of mature deliberation when they make decisions that affect the lives of their students. Commonly, parents, administrators and students are charged with establishing a safe environment where students can peacefully coexist and learn. Teachers are responsible for lesson planning, content delivery and the assessment of student work. Assessment is generally understood as the formative and summative evaluation of subject mastery. In many districts for a teacher to conduct meaningful assessment, they need to establish and maintain high standards of academic honesty. If the standard for honest academic honesty is compromised, if students cheat or plagiarize, the teacher may be assessing someone else's work and the entire teaching and learning framework is compromised.

This study contributed to the literature on moral reasoning and the treatment of academic dishonesty by exploring the relationship between reasoning levels and the

commitment to manage the problem of cheating. Findings on whether a relationship exists between these variables, and the importance of those relationships, will provide researchers and practitioners with new insights into high school teachers' disposition toward student-cheating behaviors.

Definition of Terms

The following terms are operationally defined to provide the reader with additional background knowledge associated with educational terminology.

Academic dishonesty: The Center for Academic Integrity (2011) at Duke University defines academic dishonesty as dishonest behavior related to academic achievement including cheating, plagiarism, lying, deception and any other form of advantage unfairly obtained by one student over others. Academic dishonesty is a complex issue (Michaels & Miethe, 1989). The standards that constitute academically dishonest behaviors often vary depending on the institutional context (LaBeff et al., 1990). Pavela (1997) identified four general areas of academic dishonesty: (a) using unauthorized materials on an assignment; (b) fabricating information, references, or results; (c) committing plagiarism; and (d) enabling other students to engage in academic dishonesty. For the purposes of this study, the terms *academic dishonesty, academic misconduct,* and *cheating* will be used interchangeably.

Academic integrity: According to the Center for Academic Integrity (1999), academic integrity focuses on five values. The value of academic honesty is primary and a prerequisite to the other four: trust, fairness, respect, and responsibility.

Cheating: Cheating is defined as "the attempt, by deceptive or fraudulent means, to represent oneself as possessing knowledge. In testing specifications, cheating is violating the rules" (Rothstein-Fisch, Trumbull, Isaac, Daley, & Perez, 2003, p. 3).

Dispositions: Dispositions are attributed characteristics of a teacher that represent the trend of a teacher's judgments and actions in ill-structured contexts (situations in which there is more than one way to solve a dilemma). Further, it is assumed that these dispositions, trends in teacher judgments and actions, develop over time when teachers participate in deliberate professional-education programs (Reiman & Johnson, 2003).

Ethical thinking: For the purpose of this study, the term *ethical thinking* refers to the process that guides a person to make decisions that are considered to be either right or wrong.

Ghostwriter: A person who uses a pseudonym and writes on a contractual basis.

Honor code: Honor codes include: (a) a written pledge by students affirming their work will or has been done honestly; (b) the majority body for judiciary hearings consists of students, or the chair is a student; (c) unproctored examinations and tests; and (d) language in the code that places some level of responsibility on students to report incidents of academic misconduct they learn about or witness (McCabe & Trevino, 1993).

In-service high school teachers: Teachers who are contracted to work in general-education classrooms either part time or full time in a public school in California.

Moral reasoning/judgment: Moral reasoning is evaluative reasoning that requires the explicit application of an individual's values about human welfare and social justice (Rawls, 1971).

Preservice high school teachers: This term is being used to represent students who are enrolled in an accredited single-subject credentialing program. In the State of California, in order to obtain a preliminary teaching credential, the California Commission for Teacher Credentialing (CCTC) requires teacher candidates to enroll in a Single-Subject Teaching Credential program and to complete coursework and a fieldwork placement. They are not contractual employees of the school system.

Principled level of moral reasoning: This term is synonymous with "post-conventional reasoning." This level of reasoning in Kohlberg's and Rest's nomenclature consists of Stages 5 and 6, where values and ethical beliefs are internalized and personally meaningful.

Schema: Schema are cognitive structures that replace Kohlberg's stages. Rest's research demonstrates phenomena that link the theory of moral schemas more closely with information processing and decision making (Rest, 1979).

Single-subject credentialing student: Students who are enrolled in a Single-Subject Teaching Credential program. The CCTC authorizes single-subject credential holders to teach the specific subject(s) named on the credential in departmentalized classes, such as those in most middle schools and high schools.

Wiki: A website that allows the creation and editing of any number of interlinked web pages via a web browser using a simplified markup language or a text editor (EncyclopediaBritannica.com, 2011).

Researcher's Background

The researcher holds a bachelor's degree in religious studies and a master's degree in education and has been active in the field of education for the past 25 years.

For 7 years the research worked at Bronx Community College, CUNY, developing and managing means-tested academic upgrading and job-training programs that served inner-city youth and adults. After spending 6 years designing English Language Arts curriculum for a textbook publisher, the researcher taught English at a private university in central Japan. Prior to and during doctoral studies at the University of San Francisco, the researcher taught a range of English language arts classes at a public high school and education courses at several universities in the Bay area of northern California. It was during that period that Internet use become common. Study habits were affected at every level and new kinds of cheating behaviors began to be identified. Increasingly, students were submitting work that seemed at odds with their skill levels or personalities. Often the researcher traced passages of submitted work to documents online. Through those experiences, the researcher became interested in the "new plagiarism" and other types of technology-related cheating. The question surfaced, How can teacher-training programs prepare teachers to cope with and effectively manage the problem of academic dishonesty?

Summary

Throughout recorded history education has played a central role in providing order and benefit to society. Although the purpose of education depends on the nuances of a particular historical and cultural context, a central tenet to teaching and learning is the cultivation of good character. The elements that constitute good character, such as wisdom, honesty, and integrity have fairly good concurrence across religious traditions, cultural identities, and historical periods. Accordingly, teachers are expected to model

behavior that reflects good character and to monitor and evaluate the behavior of their students.

In recent years, teachers, school officials, and the public at large have increasingly called academic behavior into question. The topic is popular in scholarly research literature and in the popular press. Although this is not a new problem, by most accounts it is increasing (Josephson, 2010; McCabe & Trevino, 1993). A number of factors seem to be contributing to this trend. High school and college instructors cite a lack of administrative support when they charge students with cheating. They also acknowledged a high tolerance for cheating among faculty members. The problem is further aggravated by widespread use of the Internet. The Internet along with high tech equipment makes it easy for students to cheat

Kohlberg (1969) theorized that individuals with higher levels of moral reasoning tended to define *good actions* in terms of rights and standards that are critically examined and on which the large society concurs. Studies during the 1990s showed that teachers with higher levels of moral reasoning tended to encourage a critical exchange of ideas that fosters democratic classrooms where students participate in rule making and the establishment of social norms. Recent studies also reported on correlations between higher levels of moral reasoning among teachers and good classroom practice.

To date, few studies have considered teachers' attitudes toward cheating as a problem and the importance of upholding high standards of academic integrity. Another gap in the literature is the study of the relationship between teachers' moral reasoning and their strategies for controlling the cheating problem. This study examined moral-reasoning levels, attitudes about cheating, and attitudes about taking action. Specifically,

it is an investigation of how teachers will act to maintain a climate of academic integrity through proactive classroom-management strategies that aim initially to prevent cheating from occurring, and reactive strategies that punish the cheater after infractions have occurred. The next chapter reviews the literature of the history and causes of academic dishonesty, moral reasoning among preservice and in-service teachers, and character education in teacher-training programs.

Chapter II

Review of the Literature

Introduction

This chapter reviews the key existing literature relating to academic misconduct, moral reasoning, and character education in teacher-training programs. Three related themes are divided into three sections: the first section provides a short history of classroom management and academic misconduct, the causes of academic misconduct at the high school and college level, the impact of the Internet, and cheating prevention policy and practices. The second section provides an overview of the literature on the issues related to moral-reasoning levels among in-service and preservice teachers, and among undergraduate education majors. The third section is an overview of character education in teacher-preparation programs.

Classroom Management and Academic Misconduct

The scholarly study of classroom management in U.S. public schools has a relatively brief history. At the start of the 20th century, common sense rather than evidence-based policy were the norm. A pioneer in the field, Bagley (1907) based work on personal experience and psychological principles that were popular at the time. Bagley propagated the conventional notion that teachers, by virtue of their status, were imbued with authority. Cheating was simply forbidden. The teacher was held accountable for delivering lessons, and for "rearing little savages" into becoming honest and responsible citizens (p. 61). Classroom rules and procedures were drilled and memorized. Although preventative measures were considered preferable to reactive punishment, infractions were dealt with quickly and summarily. Bagley's empirical

studies consisted of surveying 100 teachers on the challenges they faced in the classroom. The results were published in a series of 15 principles of effective punishment for disorderly and dishonest conduct in the classroom.

Wickman (1928) conducted a much larger study, surveying 511 teachers in Cleveland, Ohio and analyzing the type and severity of the management problems confronted there; Wickman then surveyed mental health workers and compared their responses. Teachers rated infractions such as cheating and thieving among their biggest problems. Wickman concluded that the primary cause of classroom problems were related to mental health and that most behavioral problems "indicated a need for character education or mental treatment" (p. 82).

In the 1920s the theory of social efficiency took root in the public school system. Teachers expected integrity, output, and standardization; a model similar to that used in production plants. Students were expected to behave responsibly and to earn their grades much in the same way workers earned their wages (Pace & Hemmings, 2006). Breed (1933) published a textbook that identified classroom management as a unique discipline. Perhaps Breed's most significant observation was that classroom management as a discreet discipline lacked a strong theoretical framework.

Brophy reported that pre-World War II classroom-management publications were based on opinion rather than reliable research. In a chronicle of classroom management research Brophy wrote, "The authors began by distilling the wisdom of practice and then dressed it up with citations, rather than beginning with a set of theoretical principles and then proceeding deductively" (as cited in Evertson & Weinstein, 2006, p. 22). During the midcentury, behavioral research on conditioning and reinforcement was used to shape

desirable behavior (as cited in Evertson & Weinstein, 2006, p. 25–26). Many teachers reacted against the notion that misbehaving students should be "given the silent treatment" through extinction methods. Brown (1952) reiterated the ideology that teachers were dominant, students were subordinate, the climate was moralistic, and the focus was on inculcating socially acceptable habits (as cited in Evertson & Weinstein, 2006, p. 22). Kounin and Gump (1958) conducted research that focused on the "ripple effect" of desist interventions and identified "effective classroom managers" as those teachers whose classrooms had a minimum of academic misconduct; and "ineffective managers" as those teachers whose classrooms were rife with misconduct (p. 22). Effective managers prevented misconduct from occurring by having structures and routines in place.

In 1964, sociologist Bowers published the first in-depth and far-reaching study on the nature and prevalence of academic misconduct. Bower investigated cheating among 5,000 college students on nearly 100 campuses and reported that approximately 50% of those in the sample had engaged in some form of academic misconduct. Bower's groundbreaking work had an enduring impact on a broad range of subsequent studies on cheating at the high school and college level. Subsequent studies focused on cheating infractions including cheating on examinations, buying or borrowing information, plagiarism, and reusing academic documents (McCabe, Trevino, & Butterfield, 2001).

Causes of Academic Misconduct

A range of studies has considered the antecedent causes that result in cheating behaviors. Pulvers and Dierkhoff (1999) examined the relationship between internal and external motivations. Their results suggest that both internal and external factors

influence the decision-making process that results in misconduct. Malinowski and Smith (1985) studied the relationship between moral judgment and other variables relevant to cheating behaviors. The DIT was administered to 53 male college students in one location on the campus. After testing, students were observed in a laboratory setting. The purpose of the observation was to detect cheating behaviors. The researchers found that although subjects who had higher DIT scores cheated less than students with lower DIT scores, still 77% of those with higher DIT scores cheated at least once during the observation. The researchers found that the strongest determinants of cheating was principled reasoning scores, the next category in order of importance was situational factors such as temptation. The third category of importance was moral affect, such as anticipatory guilt.

Turiel's (1983) domain theory of social reasoning offered an explanation of the ambiguous relationships between moral reasoning and academic cheating. Turiel distinguished between matters in the realm of morality from those in the realm of social convention. Matters in the realm of morality involve major philosophical and social concerns such as justice and human rights; malevolent behaviors in the moral domain can cause physical or psychological injury. The conventional domain involves making judgments in social norms such as saying, "bless you" when someone sneezes or picking up a magazine that was dropped and handing it to the owner. These behaviors are often referenced as common sense or common decency. The judgments in this domain carry relatively less weight because the behaviors they regulate do not seriously impact others. Rules in the moral domain carry a prescriptive force or theological mandate that would make deviations from the principles difficult to rationalize. McCabe (2001) reported

results from a group of 1,100 high school juniors and a separate group of 2,200 college students about their personal ethic regarding cheating behavior. Although approximately 70% of the students thought that copying entire sections almost word for word was unethical, only 35% considered copying a few sentences without proper citations to be unethical.

Peer influence appears to be a major factor in the decision to cheat. Drinan (1999) reported that cheating was encouraged when "students feel a loyalty towards each other and are reluctant to *rat* on each other" (p. 32). In their study, Rabi, Patton, Fjortoft, and Zgarrick (2006) measured the responses of 296 pharmacy students at four universities to five ethical scenarios that involved incidents of academic dishonesty. One of their findings was that 65% of students would not report a fellow student who cheated. Pulver and Dierkhoff (1999) surveyed 280 undergraduate students from two liberal arts colleges using the University Classroom Environment Instrument and the Survey on Academic Dishonesty. Their results suggested that a connection exists between students' perceptions of the classroom environment and their willingness to cheat. In depersonalized learning environments, students were more prone to cheating. McCabe and Trevino (1993) conducted a study of 6,096 undergraduates at 28 universities and found that rates of academic dishonesty were significantly correlated to the impression that others were cheating and the notion that cheating doesn't hurt anyone.

Love and Simmons (1998) studied the factors that influenced cheating behaviors by interviewing and surveying graduate students at a large public university in the Midwest. Students reported that the probability of being caught and leniency on behalf of their professor were the most important factors when deciding whether to cheat. In a

review of 107 studies published between 1970 and 1996 on cheating among college students, Whitley (1998) found that students were more likely to cheat when they felt incompetent in the subject area.

Other causes found in the literature are procrastination (Roig & Caso, 2005) and lower levels of moral reasoning (Szabo & Underwood, 2003). Students described education as an investment in their future and cheating as a means to maintain a competitive edge. When money is the primary goal, education is viewed as a means to that end. In a study conducted on more than 5,000 business and nonbusiness graduate students at 32 colleges and universities in the United States and Canada, McCabe et al. (2006) confirmed that students cheat to get a good job. Vojak (2007) also found that a majority of students equate their education to monetary success and that cheating is considered acceptable if it leads to an acceptable career. Decisions about academic dishonesty are influenced by an ethical climate that is generated by the attitudes of parents, teachers, and friends (McCabe & Trevino, 1993, 1996).

Students seem to break rules because they haven't mastered the relevant writing conventions. Dant (1986) surveyed 309 college freshmen from 13 geographic regions that attended a large private university. Fifty percent of the students said that they copied much of their essay content verbatim from source texts. The students reported feeling unprepared by high school English classes to write reports and essays without resorting to copying source material. Over 80% of the participants reported that one or more of their high school English teachers recommended copying information word by word from outside sources.

Roig (1997) conducted two studies of undergraduate students from two private colleges in a metropolitan area on the East coast. The students were given an original paragraph and several rewritten versions of it. Some of the versions were superficially modified; others were thoroughly paraphrased. Students were asked to identify the plagiarized versions and paraphrased versions of the paragraph. Findings showed that approximately 75% of the students correctly identified the paraphrased version of the paragraphs but nearly 50% misidentified some of the plagiarized passages, thinking that they were correctly paraphrased. The researchers concluded that many students did not fully comprehend the intricacies of the writing conventions. It may be safe to conclude that students in that category would plagiarize unintentionally.

The Internet

With the proliferation of digital source material on the web, academic misconduct has received renewed attention (Diekhoff et al., 1996; Groark, Oblinger, & Choa, 2001). The Internet offers new alternatives for cheating. Access to the web allows students to borrow, exchange, and directly steal protected material. The distance between one's own work and that of another person's work can be bridged by cutting and pasting from the Internet. The Internet, in addition to its benefits of providing a wealth of resources to scholars, has also made it much easier for students to find and copy other people's work and use it as their own. According to the MIT web page entitled, *Academic Integrity: Using the Internet as a Source—A Special Note*

> The Internet has made academic research must easier than it used to be. Databases have been created that compile much of the published material relevant to a certain field, saving you valuable time... Yet the Internet poses special problems.

> Because it is relatively new and because so much of what appears on the Internet does not indicate the author's name, people tend to think the information they find there is "free" and open for the taking. ... Students commonly use the Internet to access the following:
>
> * Articles originally published in print media that are now available online through subscription services like LexisNexis or ProQuest.
>
> You can access services like these through the MIT Libraries at: http://libraries.mit.edu/vera/. For assistance in using them, contact the Libraries' Ask-Us! service at: http://libraries.mit.edu/ask-us/.
>
> * Articles published in online journals or newspapers
>
> * Web pages or web sites sponsored by reliable institutions
>
> Treat the information you find electronically the way you would treat it if it were printed on paper. (Massachusetts Institute of Technology, 2007)

Although some students have difficulty understanding how to properly use the Internet as an academic tool, others exploit the medium and knowingly misuse academic content and intellectual property. Many students believe that web-based information resources should be public domain and do not need to be cited. Underwood and Szabo (2003) investigated the attitudes and beliefs of 291 science students at a large public university. The results revealed that more than 50% of the students used the Internet to cut and paste and for other academically dishonest activities. The researchers also found that increased exposure to the Internet supported a willingness to engage in plagiarism.

A popular alternative to cut and paste plagiarism is the use of online writing assistance services (OWAS). OWAS are websites that offer customers original essays

for a fee. An example of OWAS is the Academic Writing Services website (Academic Writing Help.com, 2011), which features customized papers, a rushed delivery service, unlimited revisions, customer support, and a satisfaction guarantee. OWAS sites are commonly referred to as *essay mills* or *paper mills*. The term *paper mill*, although somewhat dated, refers to repositories of student papers that have been collected and indexed. OWAS sites are generally understood to refer to sites that offer texts written by ghostwriters. This service develops and delivers papers that are generally very difficult to trace and their purchase is difficult to verify (Bauman, 2009).

Morgan and Vaughn (2010) discussed a historical relationship between increased college enrollment and the plagiarism-for-profit business. The first example of this trend was evident between 1944 and 1956, when the Servicemen's Readjustment Act funded higher-education costs of World War II veterans (Morgan & Vaughn, 2010). The business of ghostwriting college papers expanded with improved telecommunications and duplication services. Beginning in the 1950s orders for original compositions were placed on the telephone and orders would be delivered within a guaranteed time frame (Stavisky, 1973).

Since the 1990s the Internet has increased the supply and demand for ghostwritten papers. A web search of terms like *term papers* or *writing assistance* generates hundreds of websites offering prewritten essays for a fee or free of charge (Stevenson, 2001). Most sites advertise clearly circumscribed services that include customized papers that are targeted for specific types of customers. During an ordinary search on Goggle, over a million links to sites surfaced that offered help on term papers. Sites often include such claims as "guaranteed non-plagiarized, undetectable papers" and "guarantees that the

student can send the paper back for modification if it does not meet their guidelines" (E World Publishing, 2001; see Figure 2).

Figure 2. An advertisement for Paper Masters, a Division of E Publishing, Inc. *Note.* From *Paper Masters*, by E World Publishing, 2001, retrieved from http://www.papermasters.com/real.html

At sites such as SchoolSucks.com a full range of completed term papers is available. Some services offer unlimited usage for an annual subscription rate. Other sites market custom papers that they claim are written by recent graduates from well-known universities. Many sites claim that their products will evade plagiarism-detection services and that they make careful use of misspelling and grammatical errors that calibrate the writing to grade-level expectations (see Table 2).

Table 3 represents data collected by McCabe (2001) on students' attitudes and behavior regarding Internet source material. These survey results are derived from a group of 1,100 high school juniors and a group of 2,200 college students who participated in a similar survey in academic year 1999–2000.

Table 2

A Sampling of Study Support and Custom Paper Websites

Test preparation websites	Term paper websites	Edit service websites
www.pinkmonkey.com	www.cheathouse.com	www.cyberedit.com
www.sparknotes.com	www.lazystudents.com	www.supaproofread.com
www.novelguide.com	www.geniuspapers.com	Custom-writing.org
www.givemenotes.com	www.netcheats.com	www.papercheck.com
www.schoolpaper.com	www.a1-termpaper.com	www.editorsforstudents.com
www.gradesaver.com	www.essayedge.com	Essaywritingservices.org
www.shmoop.com	www.papersinn.com	www.ivyedge.com
www.bookrags.com	www.research-assistance.com	www.bestwritingservice.com
www.novelguide.com	www.ezwrite.com	www.collegeessayeditor.com
www.homework-online.com	www.termpapers.netcustom-paper-writing.com	www.supremeessays.com
www.cliffsnotes.com		www.exclusivepapers.com
		Proofreadingpal.com

Table 3

McCabe's Results on Cheating Behavior and the Internet (1999–2001)

	Students reporting cheating behavior		Students reporting that the behavior is unethical	
Cheating behavior	High school	College	High school	College
A few sentences copied without citation	60%	40%	39%	35%
Sections copied almost word for word	34%	16%	70%	70%
Paper copied in large part from a website	16%	5%	74%	72%

Although relatively few studies compare rates of academic dishonesty in online coursework to traditional-classroom and blended coursework, there is ample incentive to improve grades by cheating (Kennedy, Nowak, Raghuraman, Thomas, & Davis, 2000). Grijalva, Nowell, and Kerkvliet (2006) surveyed 1,840 students enrolled in undergraduate-level online courses during the 2001 fall term. They reported that

academic dishonesty in online classes was no more pervasive than in traditional classrooms. Lanier (2006) compared the prevalence of cheating in traditional lecture courses and online courses among 1,262 students at a large public university. They found that the number of students who cheated in online courses was somewhat higher than in face-to-face classes. In another study, Stuber-McEwen, Wiseley, and Hoggatt (2009) surveyed 225 upper- and lower-division undergraduate students using the Student Academic Dishonesty Survey to determine the frequency and type of cheating violations being committed. Results indicated that online students were less likely to cheat than students in traditional courses. Kennedy et al. (2000) surveyed 162 students and 69 faculty members at a small Midwest college. The researchers found that both students and faculty believe it is easier to cheat in distance-learning environments.

Academic Misconduct at the College Level

Since Bower's seminal findings in 1964, academic dishonesty at the college level has been on the rise (McCabe, 2005). In a longitudinal study, McCabe and Bowers (1994) revisited Bowers (1964) doctoral study. The original study found that 26% of the college students at nine campuses had cheated on a test or examination by copying from another student. In the 1994 McCabe and Bowers study, 52% of the 1,800 students from the same nine campuses admitted to copying from another student on a test or examination. Similar increases in cheating behaviors were found across several variables in the 1994 study.

In another longitudinal study Diekhoff et al. (1996) examined changes in cheating attitudes and behaviors among college students between 1984 and 1994. In their findings, 62% of college students reported cheating in 1994, up from 54.1% in 1984.

Despite this increase in cheating, students were less likely to neutralize their cheating behaviors in the 1994 study, evidencing higher levels of group acceptance of cheating. McCabe's (2001) survey of 18,000 students, 2,600 faculty and 650 teaching assistants found that half the students surveyed did not view cutting and pasting as plagiarism, a finding replicated in Scanlon and Neumann's results (2002). Among graduate students, 25% admitted to cut-and-paste plagiarism.

In a qualitative study, Payne and Nantz (1994) investigated the dominant cognitive constructs and social accounts of students who self-reported cheating behaviors. Students differentiated the level of seriousness between cheating on examinations and other forms of academic misconduct. They viewed breaking rules on writing assignments as "not really" cheating. Power's (2009) qualitative study confirmed the Payne and Nantz findings. Power found that many college freshman and sophomores felt little sense of moral agency if the material was meaningful to them.

Academic Misconduct at the High School Level

Cheating among high school students has also risen dramatically during the past 50 years. The preponderance of statistical and anecdotal evidence underscores several disturbing trends, indicating that secondary-level cheating is not only occurring more frequently, but that students are using more sophisticated methods to break the rules. McCabe and Bowers (1994) found that of 24,000 high school students in 70,000 high schools, 64% of students report one or more instances of serious cheating, which included copying, helping someone else cheat on a test, or using crib notes. The 1999 Who's Who Among American High School Students poll of 3,123 junior and senior students who planned to attend college showed that 80% cheated in the 12 months prior

to taking the survey, more than half said that cheating is no big deal, and 95% of cheaters say they were not caught. In 1999 the Educational Testing Service (ETS) entered into a partnership with the Ad Council to develop a national campaign to increase awareness about the prevalence of cheating in high school. The ETS commissioned three studies: (a) Focus groups, which included 100 test takers of the SAT, AP, GRE, GMAT, TOEFL, or PRAXIS tests; (b) Focus groups and interviews with 255 test takers and proctors, and (c) Telephone interviews with 2,436 test takers and parents. Key results indicated that cheating is more prevalent and considered more acceptable than it was in previous times; that cheating is endemic to every facet of social life including politics, business, and school; and that the Internet is obscuring the definition of cheating. The most cited reasons students gave for cheating were that it is a victimless crime, that everybody does it, and that it makes up for unfair tests or lack of opportunity (ETS, 1999).

McCabe (2001) surveyed more than 4,500 high school students and found that 72% of students reported one or more instances of serious cheating on written work, 52% had copied a few sentences from a website without citing the source, and over 45% had collaborated with others when assigned to work individually. The Benenson Strategy Group (2008) conducted 1,013 online interviews with students that used cell phones in Grades 7–12. Results showed that 35% of teens admitted to cheating. Of those who admitted to cheating, 26% said they used downloaded information during tests, 25% said that they texted friends during a test in search of answers, 17% reported photographing the test, and 20% said that they searched the Internet for answers during the test. Many students thought these behaviors did not constitute cheating. Only about half of students polled stated that cell-phone use during a test was a serious offense. Thirty-six percent

said downloading a paper from the Internet was not a serious offense, and 42% said copying texts from websites was a either a minor offense or not cheating at all (Benenson Strategy Group, 2008). The Josephson Institute's Report Card (2008) on the Ethics of American Youth 2008, surveyed a total of 29,000 high school students. Selected results of that survey are represented in Table 4, indicating the percent of students who had engaged in these practices in the 12 months prior to taking the survey.

Table 4

Key Results of the Josephson Studies (2008)

	Once	2+ Times	Never
Lied to a teacher about something significant.	28%	37%	36%
	7990	10521	10247
Copied an Internet document.	17%	19%	64%
	5015	5453	18300
Cheated during a test at school.	26%	62%	18%
	7365	10940	10413
Copied another's homework.	20%	62%	18%
	5752	17737	5249

Note. From *Report Card on the Ethics of American Youth,* by Josephson Institute of Ethics, 2008, retrieved from http://josephsoninstitute.org/surveys/index.html

Cheating-Prevention Policy and Practice

Cheating-prevention policy and expectations about how faculty should treat the problem differs from school to school. Some schools discourage teaching staff from taking aggressive action to constrain the problem. Faculty actions on suspected cases of cheating generally fall into two categories. The first is academic sanctioning, where the instructor initiates formal charges through the school administration or the university governance. The second is handling the problem with the student according to the rule in the course syllabus. In a 2004 survey of undergraduate and graduate instructors,

Ercegovac and Richardson found that most faculty members handled cheating on an individual basis, believing it to be a problem between the instructor and student.

Nadelson (2007) surveyed 72 full-time graduate and undergraduate faculty on their responses to incidents of academic misconduct. Faculty reported 460 cases of undergraduate cheating. Action was taken in 90 cases (19.5% response rate). Faculty reported 110 cases of graduate-student misconduct with action taken in 49 cases (44% response rate). Only 12 of the 72 faculty members reported making formal charges against students at the department level. Ercegovac and Richardson (2004) reported that in many situations, faculty members knew of cases of cheating, yet choose not to pursue them. Reasons for this included unclear definitions of what constituted academic dishonesty or the feeling that the institution did not provide sufficient training and support on the subject (Leask, 2006). McCabe (2001) found that the two main reasons instructors did not initiate proceedings against students were feeling sympathy for the student and to avoid tedious reporting procedures. McCabe (1993) surveyed a sample of 800 faculty members at 16 U.S. colleges and universities and found that the faculty was reluctant to report cheating and preferred to handle suspected cases of cheating on their own. The study authors also reported that many faculty members did not treat cases of academic dishonesty very harshly (McCabe, 1993).

Graham, Cagiltay, Lim, Craner, and Duffy (2001) reported that 20% of faculty did not monitor students while proctoring a test and 26% of faculty did not include statements regarding cheating in their syllabi. Furthermore, even though 79% of faculty reported having caught a student cheating, only 9% reported penalizing the student. Genereux and McLeod (1995) found that the most common reason given by college

students for cheating (n = 365) were low instructor vigilance or instructor apathy. McCabe (2005) found that faculty members often feel the need to police student work, a role they do not want to play. Whitley and Keith-Spiegel (2002) compiled a list of reasons faculty members are reluctant to report suspected violations:

- Lack of administrative support
- The student will be punished in the end anyway
- There is not enough time
- Not 100% sure that cheating occurred
- Fear of lawsuit
- The student has enough problems already
- It will cause more problems than it's worth

A general consensus in the literature was that challenging a student can be extremely time consuming and the procedures for confronting a student can be unclear or laborious.

Studies conducted during the 1990s indicated that students were increasingly ambivalent about the ethics of cheating and that faculty members rarely implemented either proactive or reactive measures to reduce cheating (Wilson, 1999). In response to these findings, many institutions began instituting measures to combat the problem. Allocation of instructional time was dedicated to orienting students to campus policy and campuswide honor codes were implemented to appeal to the students' sense of responsibility. Based on the findings of McCabe et al., (2001), traditional and modified honor codes reduced the frequency of cheating on many campuses. Honor codes often include clear rules regarding unacceptable behavior and require a signed pledge not to cheat. Students often participate in the process of adjudicating cases. Some honor codes

also include nontoleration provisions that require students to report any observance of cheating.

Modified honor codes typically include a role for students in the judicial process but generally do not include unproctored examinations or the use of a pledge. It is important to note that although the presence of honor codes had a positive effect in curbing dereliction, the reduction of cheating rates may be the result of implementing the honor codes, thereby fostering an open forum about the issue of academic dishonesty. McCabe et al., (1999) surveyed more than 1,700 students at 31 U.S. colleges and universities. Students were asked to respond to an open-ended question on the topic of cheating in college. The report found that more than 40% of the almost 4,300 respondents offered comments. Many of comments reinforced the importance of institutional–contextual factors such as the degree to which (honor) codes are embedded in student culture and campus life; the degree to which the campus atmosphere was supportive and trusting; competitive pressures; the clarity of rules regarding unacceptable behavior and the severity of punishments; faculty monitoring; peer pressure to cheat or not to cheat; and class size.

Another prevention method that can be incorporated into an existing program is plagiarism-detection services (PDS). PDS compare suspect documents to a corpus of other documents and matches parts of the suspect document to those in the corpus. Universities often contract PDS for a specified duration. As with other search engines, plagiarism is detected if the corpus contains the original source or some of the plagiarized text. Two companies that enjoy favorable reputations in this field are TurnItIn.com and

Plagiarism.com. These services publish customized reports that connect the suspect passages to websites that display similar or identical content.

Moral-Reasoning Levels

During the past 3 decades a series of studies have addressed moral-reasoning levels in in-service teachers, preservice teachers (those enrolled in a graduate program of teacher education), and in undergraduate education majors. The studies considered the moral reasoning of groups of education students compared to noneducation students and moral reasoning and teacher performance. Other variables considered were ethical decision-making and cheating behaviors.

In-Service Teachers

Johnston and Lubomudrov's (1987) case study of 8 female in-service elementary teachers described how teachers at different levels of moral reasoning viewed school rules differently. Teachers with lower moral-reasoning levels indicated that the need for rules was to maintain social order, that school rules should be implemented through hierarchical power, and that the rules were inseparable from the authorities that established and enforced the rules. Teachers with higher levels of moral reasoning believed that the purpose of school rules was to ensure the rights of individuals and groups and that school rules could be used as a framework to promote student understanding and responsibility. Diessner (1991) found that overall, preservice and in-service teachers had principled-reasoning scores in the 40s, meaning that teachers were functioning at the principled level only 40% of the time. Hence, a majority of teachers were reasoning at the lower two brackets, thus, personal interest or maintaining norms level most of the time.

Preservice Teachers

Cummings et al. (2001) found that the moral-reasoning level of preservice teachers was relatively low compared to undergraduate students in other fields. The researchers suggested that critical thinking necessary for thoughtful decision making about moral issues may have been underdeveloped due to a lack of theory-based courses in the teacher-education curriculum. In a follow-up study, Cummings et al. (2002) administered the DIT and the Academic Misconduct Survey (AMS) to measure moral reasoning and self-reported academic misconduct among preservice teacher-education students (n = 145). Seventy six percent of the students that reasoned at Kohlberg's (1986) postconventional levels admitted to engaging in some type of academic dishonesty during the 12 months prior to being tested. Those results approximate the percentage of students with lower levels of moral reasoning that self-reported engaging in academic dishonesty.

Diessner (1991) reviewed 30 studies that used Kohlberg's (1969) MJI and found that less than 50% of in-service teachers reasoned at the principled level when considering hypothetical moral dilemmas. Diessner wrote, In terms of the DIT, most studies find both in-service and preservice with principled-reasoning scores in the 40s. In general, the studies with undergraduates in education show a range of principled-reasoning score means from the 30s to the 40s; and the studies with in-service teachers show a typical range of principled-reasoning score means in the 40s to 50s. Reported typical mean scores range from 10 to 80.

Undergraduate Education Majors

Derryberry, Synder, Wilson, and Barger (2006) measured the moral-reasoning levels of 74 education and 50 liberal-arts majors. They asked two key research questions,

> First, do differences exist between those in education majors and liberal arts majors at the same university on measures of and related to moral judgment? Second, do relationships among these variables differ for education majors and liberal arts majors at the same university? (p. 3)

To determine if mean differences existed between the groups, separate analyses were conducted for each dependent variable or dependent variable set. A multivariate analysis of variance (MANOVA) was conducted with principled-reasoning, maintaining-norms, and personal-interest scores as the dependent variables. No significant differences in moral-reasoning levels were seen between major groups. Those results suggested that factors beyond college majors are relevant to assessing moral-development levels. However, as Derryberry et al. (2006) noted, the findings applied to only one university and addressed general categories of majors (education and liberal arts) rather than specific majors within each category. A rather striking finding of the Derryberry study was that students enrolled in credential or licensure programs were more inclined to cheat than those enrolled in standard degree programs.

Daniel, Blount, and Ferrell (1991) administered the 37-item survey AMS to measure cheating behavior. Their study of 97 teacher-education students reported on their perception of frequency of various cheating behaviors by students in their program, the perceived maturity level of the persons most likely to cheat, and the degree to which the offenders neutralized their cheating behaviors. Although cheating was not perceived as a

major problem among teacher-education students, a significant relationship was noted between neutralization and academic misconduct. Ferrell and Daniel (1995) conducted a follow-up survey with the AMS. The researchers clustered variables and used factor analyses to identify recognizable prototypes. Respondents in both phases were undergraduate teacher-education students (n = 330). The researchers explained,

> Phase I measured academic misconduct across five constructs: cheating on tests and assignments, inappropriate use of resources, quasi-misconduct, subtle manipulation, and bold manipulation. Phase 2 resulted in the identification of several interpretable clusters of persons, ranging from self-proclaimed noncheaters to those who indicated a clear propensity toward various types of misconduct. (p. 345)

Some weaknesses and inconsistencies in these studies have been noted. According to McNeel (as cited in Rest & Narvaez, 1994) the referenced composite samples that were used in some of these studies were outdated and teacher-education majors were often compared with composite samples representing a mixed sample of majors from different institutions. Another problem that was noted was that previous studies focused exclusively on participants' abilities to make postconventional moral judgments, that is, the most advanced level of moral reasoning (Colby & Kohlberg, 1987). Hence, those studies refer only to the degree to which teacher-education majors called on postconventional reasoning when considering moral dilemmas; the studies did not account for reasoning that called on personal interest or maintaining norms.

Character Education in Teacher-Education Programs

Moral reasoning is often described as the process that guides a person to make decisions that are either right or wrong. A number of studies call for moral-education courses in teacher-education programs to support and encourage ethical thinking (Ryan & Bolin, 1999). Hunter (2000) contended that to engender moral character in a classroom context, the society at large must support relatively high standards. Others (Durkheim, 1973; Green, 1999) put forth similar arguments centered on the idea that morality cannot be taught if moral behavior is not sustained in larger moral communities. Mathison (1998) surveyed 287 teachers and student teachers on the question of whether character education should be included in a teacher-education curriculum. A majority of respondents responded affirmatively and 90% agreed that teachers are considered role models for students. Seventy four percent responded that their teacher-education programs dedicated little time and attention to character education. In the current climate of growing concerns about academic dishonesty, there are increasing demands that teachers act as moral influences on young people (Lickona, 1998).

Other studies have investigated teacher-education-program curriculum and found that most courses in graduate education programs were skills and methods based (Cummings et al., 2001; Goodlad, 1994). In a subsequent study Cummings, Maddux, Harlow, and Dyas (2002) measured the ratio of methods-based courses to theoretically based courses in 30 elementary-education programs. Along with independent evaluators, they found that 97.72% of course offerings qualified as either skills or method based. Yeazell and Johnson (1988) recommended that the study of moral reasoning and ethical issues be included in a teacher-education-course curriculum. They suggested that

teachers who were reasoning at or below their students' levels would be challenged when making decisions based on fairness or when meting out discipline.

Goodlad (1990) noted that few teacher-education programs had curricular structures that would accommodate the inclusion of ethics courses, and that teaching as a moral activity was not significantly emphasized at the public and private institutions in the study. Strike and Ternasky (1993) reported that codes of ethics did not play a significant role in teacher-preparation programs. In 2002 that issue was addressed by a mandate issued by the National Council for Accreditation of Teacher Education. At that time professional ethical dispositions of teachers became a required part of the accreditation process (National Council for Accreditation of Teacher Education, 2002). Cummings et al. (2002) suggested that an "investigation of teacher education students' ethical behavior are needed, especially in view of the fact that teachers serve as role models to students" (p. 294).

Summary

In summary, the literature on moral reasoning and development spans nearly 100 years. Kohlberg's theory of cognitive moral development has become the most popular and tested theory, and it remains among the most cited works in contemporary behavioral science (Endler, Rushton, & Roediger, 1978). For over 3 decades, research studies have used the DIT to compare subgroups of students' and of faculty's moral decision making. Studies have considered moral reasoning in relation to a broad range of variables including age, gender, field of study, and psychological factors including motivation and locus of control. Overall, studies pertaining to preservice and in-service teachers' moral-reasoning scores were not encouraging. For the most part, teachers' scores did not

compare favorably with those of other college majors or professions. Undergraduate and graduate education students scored at the principled level of moral reasoning level less than 50% of the time. In terms of personal cheating behaviors, even preservice teachers at the highest DIT level admitted to committing academic infractions.

Few studies on the relationship between moral reasoning and academic dishonesty are evident in the literature. Studies concerning academic dishonesty at the high school and college level have been routinely conducted for the past 50 years. Results are fairly conclusive that the frequency and pervasiveness of academic dishonesty has been increasing since the 1960s and that a burgeoning in incidents has occurred in the past 2 decades. The literature indicates that the problem has been aggravated by easy access to information on the Internet. Various intrinsic and extrinsic motivation theories attempt to account for the high rates of student cheating. Findings suggest that both internal and external factors are at work in decision-making processes. Much research has been dedicated to formulating proactive strategies for counteracting and reducing the problem of academic misconduct. The most highly considered strategies include allocating instructional time to the topic, using antiplagiarism services to detect infractions, and instituting campuswide honor codes.

Although concerns about the moral domain of teaching have been evident in the literature for several decades, studies investigating moral reasoning in teachers are sparse. This researcher could find few studies that assessed the moral reasoning of a general population of in-service high school teachers. There is also a gap in the literature on the relationship between teachers' moral-reasoning levels and their attitudes and behaviors regarding academic dishonesty. Few studies were found that investigated the relationship

between preservice high school teachers' moral-reasoning level and their attitude concerning academic misconduct. No studies could be found regarding in-service teachers' moral reasoning and how that relates to their attitudes about academic misconduct, or the way that they manage academic misconduct in their classrooms.

The present study investigated whether there were differences between two subgroups, composed of in-service and preservice teachers, in moral reasoning and their attitudes about countering the problem of academic dishonesty through prevention and punishment.

Chapter III

Methodology

Restatement of the Research Problem

The current study focused on the growing problem of academic dishonesty at the high school level. It investigated high school teachers' beliefs regarding the seriousness of the problem and their approach to countering it in the classroom. The purpose of this study was to explore preservice and in-service high school teachers' cognitive moral reasoning levels and how those levels correspond to (a) the importance they attribute to the problem of academic dishonesty, and (b) their readiness to take proactive and reactive measures to counter the problem. Exploring the relationship between reasoning levels and beliefs about managing the problem of cheating will compliment the existing literature and provide researchers, policymakers, curriculum developers, and faculty members with insight into high school teachers' disposition toward coping with high school student cheating behaviors.

Research Design

This quantitative study was designed to revisit Kohlberg's (1981) theoretical model regarding moral reasoning and teachers' attitude about classroom cheating. An anonymous survey design was adopted because of the sensitive nature of the subject matter. This type of design collects data about a sample of participants from a given population. The primary interest was in describing the population through inferences based on the sample. The main statistical tools used were descriptive statistics (e.g., means, standard deviations, percentages, frequencies, correlations, etc.). Groups were compared in order to describe group differences statistically. Comparisons were

calculated using *t*-tests and analysis of variance (ANOVA) approaches. The anonymity of the survey allowed participants to respond with confidence, assured that their contribution would not be exploited or used against them. The anonymity also tended to reduce the distortion caused by social desirability, or the tendency to give socially acceptable answers. The surveys gathered data about the subjects' moral reasoning and their thoughts about the problem of academic dishonesty and how best to mange it. The purpose of survey research is to generalize from a sample to a population so that inferences can be made about some characteristic, attitude, or behavior of this population (Creswell, 2003). A web-based data-collection instrument with three sections was used. The first section was designed to collect demographic data. The second section surveyed the subject's attitudes about various proactive and reactive measures aimed at reducing or eliminating academic misconduct. Differences across demographic categories were examined. The third section, the DIT, evaluated the subject's level of moral reasoning by examining their responses to three moral dilemmas.

Research Setting: High School

Data were collected via an online survey that was distributed to in-service public high schools teachers in the Bay area of northern California. The three school districts , the San Ramon Valley Unified School District, the Acalanes Union High School District, and the Mt. Diablo Unified School District are representative of the districts surveyed.

The San Ramon Valley Unified School District encompasses the communities of Alamo, Blackhawk, Danville, Diablo, and San Ramon (including the new Dougherty Valley communities) as well as a small portion of the cities of Walnut Creek and Pleasanton. The district is comprised of 35 schools serving more than 28,000 students in

Kindergarten through Grade 12. Academically, the San Ramon Valley district ranks sixth among all unified school districts in California, and according to the 2008 California Academic Performance Index, is the highest ranking unified school district in the state, with enrollments of 9,000 or more students. The district operates four comprehensive high schools with 7,400 students and employs approximately 340 teachers at those sites.

The Acalanes Union High School District encompasses the communities of Moraga, Lafayette, Orinda, and Walnut Creek. The district is comprised of six high schools serving nearly 6,000 students in Grades 9–12. The Acalanes Union High School District is considered one of the highest performing school districts in California. According to the California Academic Performance Index the high schools ranks in the top 60 of the 1,000 high schools in the state. Approximately 240 teachers work at the comprehensive high school sites.

The Mt. Diablo Unified School District is one of the largest school districts in the state of California with over 56 school sites and programs. The district encompasses the communities of Concord, Pleasant Hill, Clayton; portions of Walnut Creek and Martinez; and unincorporated areas including Lafayette, Pacheco, and Bay Point. The district's statistics for ethnic/racial diversity, average class size, test scores, and numbers of limited English proficient students is roughly representative of the state's overall population. There are six comprehensive high schools with 10,100 students and 470 teachers.

Research Setting: College

The second setting for this study was a medium-sized private university in California. The survey instrument was administered to multiple campuses throughout the

university system. Respondents were enrolled in a CCTC program. The single-subject credentialing program prepares candidates to acquire a California state single-subject teaching credential. Candidates must hold at least a bachelor's degree from an accredited institution with a grade-point average of 2.75 completed in either a baccalaureate or postbaccalaureate program. Acquisition of the 2042 single-subject teaching credential is required to teach a specific subject, such as mathematics or English at the high school level. Requirements for obtaining the credential are (a) registering a passing score on the California Basic Education Skills Test; (b) verification of completion of an approved subject-matter preparation program in the appropriate subject-matter area or registering a passing score on all appropriate subtests and examinations for the subject matter examination and any other required examinations; (c) completion of a single-subject teacher-credential program that includes 45 credits of coursework; and (d) meeting the U.S. Constitution requirement by completing appropriate coursework or by passing an approved examination. Generally, in addition to coursework, fieldwork is required (Brandman University, 2009).

Population and Sample: High School

This study focused on two target populations. One target population was full- and part-time public high school teachers who were teaching in public high schools in the Bay Area of northern California during the Spring of 2011.

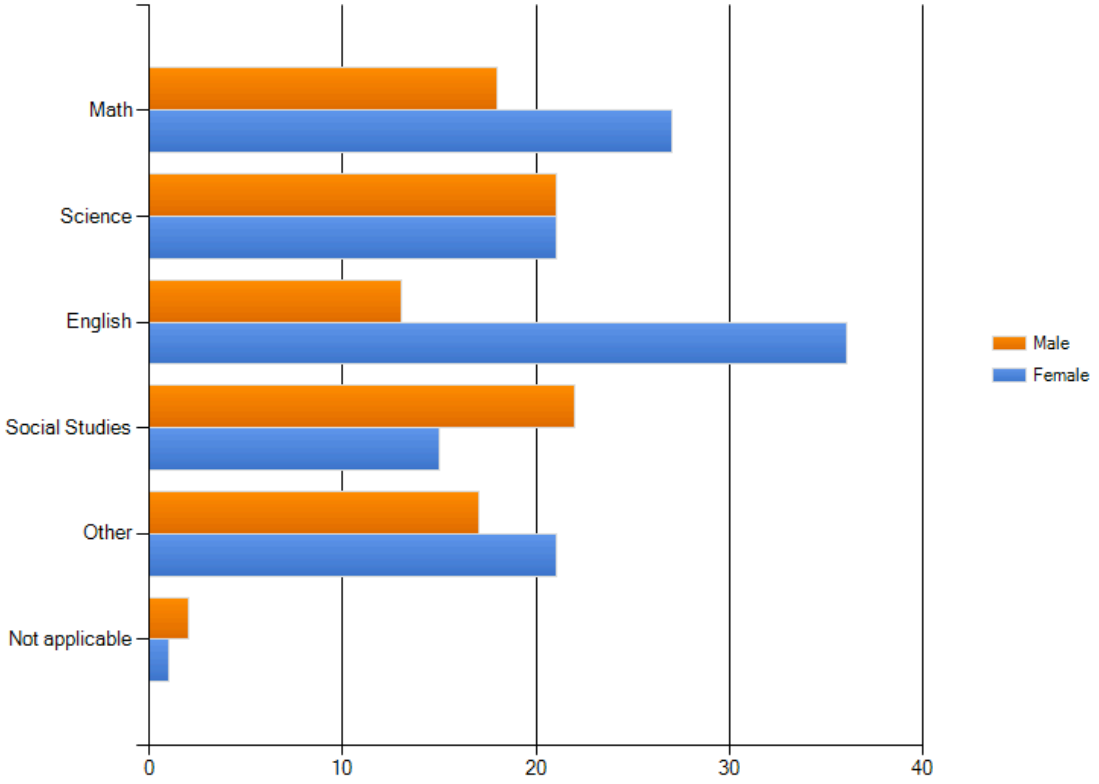


Figure 3. Gender and main teaching areas.

The overall population was comprised of approximately 65% female and 35% male teachers. The teachers' main teaching subject areas were fairly well distributed. Additionally, more than two-thirds of the teachers had been teaching for at least 7 years, and a third more than 16 years. Figure 4 shows the number of years teaching by main teaching subject area.

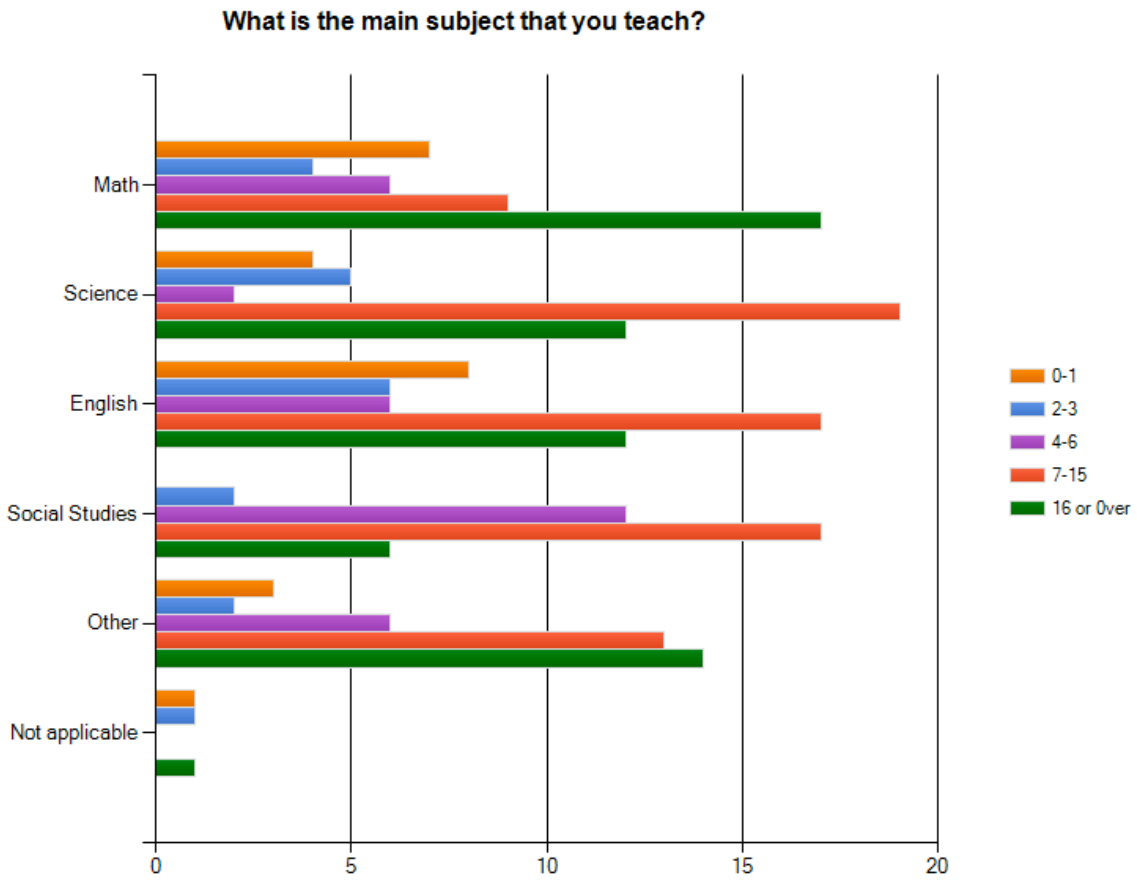


Figure 4. Number of years teaching and main teaching subjects.

The researcher contacted the principals at high school site to ask for written permission to conduct the online survey. 'An email was sent out that explained the purpose of the research and invited the teachers to take the online survey. A total sampling frame of approximately 1,500 teachers was contacted. The sampling was intended to increase the scope and range of data (Rudestam & Newton, 2007). According to the literature, a response rate of 15% of survey recipients is the norm for this type of mailing. Approximately 10% of the teachers contacted replied by partially or fully completing the survey.

Population and Sample: College

The second population for this study was a subset of graduate students who are enrolled in a single-subject teacher-credentialing program at a private medium-sized university in California. The population was comprised of approximately 60% female and 40% male students. The researcher received approval from the university Institutional Review Board Protection of Human Subject (IRBPHS) office to conduct the online survey and followed the protocol listed for the public-school-teacher group. An introductory letter explained the purpose of the research study, provided instructions, made an appeal regarding the importance of the study, and offered a prize as an incentive to increase the response rate. Twenty $15 gift cards were randomly distributed through the US Postal Systems at the end of the spring 2011 semester. Approximately 200 preservice teachers were contacted. A response rate of 15% ($N = 20$) of survey recipients was anticipated. In actuality only 8% responded to the invitation. Of those who responded, nearly 90% ($N = 16$) completed the survey.

Instrumentation: Defining Issues Test (DIT)

The researcher used an online system to send out the surveys. The survey has two sections. The first section, Rest's DIT is considered "the most widely used measure of moral judgment development" (Thoma, 2002, p. 225). The DIT (short form) is a multiple-choice recognition-task-assessment instrument that has three moral dilemmas followed by 12 response items. Participants rank and rate the statements that reflect activated schema that underlie the subject's moral thinking. Responses are categorized resulting in scores that correspond to Kohlbergian levels of moral reasoning.

From a broader theoretical perspective, the DIT corresponds to a four-component process (Bebeau, 2002). The processes are (a) the recognition and interpretation of moral situations. A sociopath, for example, may lack any basic recognition that a problem exists and is incapable of developing an interpretation that would result in moral understanding; (b) the judgment about which course of action is morally right. This involves making a judgment among available options and the decision to act based on that judgment; (c) the prioritization of what is morally right over other considerations. This requires moral motivation, the internal desire to act according to moral standards, the ability to process possible courses of moral action, and the selection of a course that seems to be the best fit for the dilemma at hand; and (d) the follow-through on the intention to behave morally. This phase involves the determination to act morally even when it would be more convenient to act otherwise.

The DIT measures moral judgment, the second of the four component processes. When the subject is faced with a moral dilemma on the DIT, they must first be attentive to the moral features of the dilemma; then they can level a moral judgment on the issue. The DIT is not designed to predict what a person would do in a certain situation. Rather, the DIT is intended to measure what a person thinks should be done in that situation (Rest, 1986). The most frequently used DIT index, the *P*-score, is a measurement of postconventional moral reasoning, the highest level on Kohlberg's scale (1969). The multiple-choice-test items that are selected indicate the subject's level of postconventional moral reasoning. Hence, a score of 50% is equivalent to the percentage of postconventional items selected to define the central issue of a moral dilemma (Rest, 1986). In moral-judgment development, the sample is considered to be modal at the

postconventional moral-judgment schema when principled-reasoning scores exceed the lower two levels (the personal-interest level and the maintaining-norms level.

Depending on activated schema, seven type indicators are classified as either consolidated (around a specific developmental stage) or transitional (between developmental stages). Bebeau (2002) and others have used type indicators to give a clearer sketch of the subject's moral cognitive characteristics, represented in Figure 4.

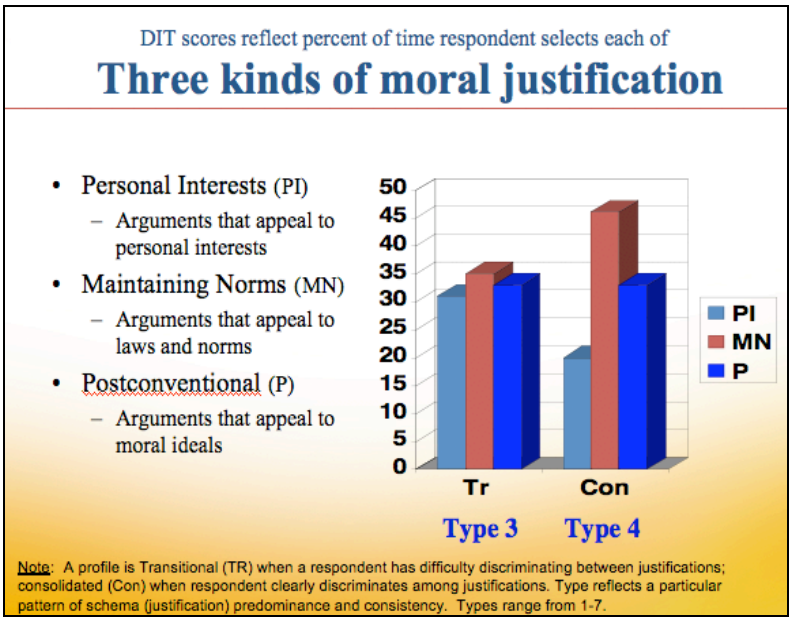


Figure 5. Defining Issues Test scores clustered around type indicators.
Note. From The Four Component Model of Morality, by M. J. Bebeau, June 25, 2010, paper presented at the American Bar Association Associate Dean's Conference, Minneapolis, MN.

A weakness of the DIT is that participants may not fully comprehend the items they select. That problem is countered by an internal reliability check. Meaningless-sounding terms and test items are mixed in with plausible answers. If those items receive high ratings, the results are not included in the sample (Rest et al., 1999). According to Rest et al., (1999), "After the four component model became well known, research interest shifted to studies that adopted a multimeasure approach in which attention to the

contribution of other components was included in the study design" (Rest as cited in Thoma, 2006 p. 73). It is the researcher's opinion that the use of the DIT along with the Academic Dishonesty Questionnaire would constitute an effective multimeasure approach.

Measurement: Defining Issues Test (DIT)

The participant's responses to the DIT questions were categorized according to values that were assigned based on the 5-point Likert scale with one representing the lowest level. The responses were then summed and divided by 3 (the number of dilemmas) to obtain a percentage for each stage. The percentage score determined the participant's reasoning level. An additional measure of postconventional moral development, referred to as the N2 score, combines the degree to which postconventional items receive higher ratings than items from the personal-interest and maintaining-norms categories (Bebeau & Thoma, 2003).

Validity: Defining Issues Test (DIT)

The DIT has proven validity in diverse ways of studying moral judgment (Rest et al., 1999). Rest et al. (1999) cited a mega-sample comprised of 45,856 DITs, scored over a 4-year period, that evidence the DIT's validity in spite of differences in age, cultural background, and the region where the tests were administered. Validity for the DIT has been assessed in its ability to differentiate groups that differ on moral expertise. A 1995 study used composite samples consisting of 1,115 participants, evenly divided between junior high school students, senior high school, undergraduate, and graduate college students. The sample consisted of 10 subgroups, ranging from the junior high school to

PhD moral-philosophy and political-science students. The studies showed that 30% to 50% of the variance of the DIT scores was attributable to level of education.

Although the DIT provides an objective method to assess moral reasoning, several distinct and significant criticisms have been leveled against it. Martin et al. (1977) argued that the structure of moral reasoning and the moral-reasoning content used on the DIT dilemmas and response choices are not clearly separate. That study criticized the test design on the grounds that,

> (a) Some stages have many more items associated with them than do other stages (hence, scale scores are not comparable with one another); (b) different dilemmas have different numbers of items from a given stage; (c) there is a significant order artifact for Stage 3 and Stage 4 items; and (d) this order effect interacts with age.

There is also a perceived lack of face validity regarding the hypothetical dilemmas in the DIT when used to assess educators' moral reasoning because none of the dilemmas presented have an educational context. This lack of face validity could cause respondents to abandon their educational perspective in favor of a general societal perspective. As a result, moral reasoning about dilemmas related to an educational context may result in different moral-reasoning levels.

A related concern involves the possibility of "story pull," a term that suggests that individuals use different levels of reasoning depending on their familiarity and experience with particular scenarios (Freeman & Giebink, 1979). The influence of story pull could account for a significant variation in responses depending on the extent to which the respondent identifies with the character in the dilemma and with the moral dilemma that the situation poses.

Reliability: Defining Issues Test (DIT)

The DIT includes several internal methods for protecting reliability. Reliability checks are performed during the DIT scoring process and data are purged if meaningless items or false data is ascertained. Test score reports include a *meaningless* score. Rest (1986) explained the design criteria,

> A number of meaningless but complex-sounding items are interspersed throughout the DIT. If too many of these items receive top ranking by a subject, we infer that the subject is not attending to meaning, and consequently invalidate that subject's questionnaire. We also have an internal consistency check in the DIT to determine if subjects are randomly responding without attending to any Item feature. (p. 197)

"Test–retest correlations over a period of several weeks average in the .80s, and the internal reliabilities as measured by Cronbach's alpha also averages in the .80s" (Rest & Narvaez, 1994). The DIT shows discriminate validity from verbal ability/general intelligence, and conservative/liberal political attitudes. Also, Rest et al. (1999) reported that the DIT produced significant trends after controlling for verbal abilities, IQ, and cognitive abilities.

Instrumentation: Cheating Management Questionnaire (CMQ)

The online survey instrument was comprised of two sections, the DIT section and the CMQ section. The CMQ is an original instrument. The questions were developed to collect demographic data and attitudinal data about student cheating. Responses were logged on a 5-point Likert grid. Low mean scores indicated less likelihood that the respondent would take action to prevent cheating or to punish cheaters. Higher mean

scores indicated a greater likelihood of preventing cheating or punishing cheaters. The CMQ section of the survey consists of 17 questions and is designed to take approximately 15–20 minutes. An electronic version of the instrument was administered with the DIT as a single file online via SurveyMonkey. A sample page of the CMQ is included in Figure 6.

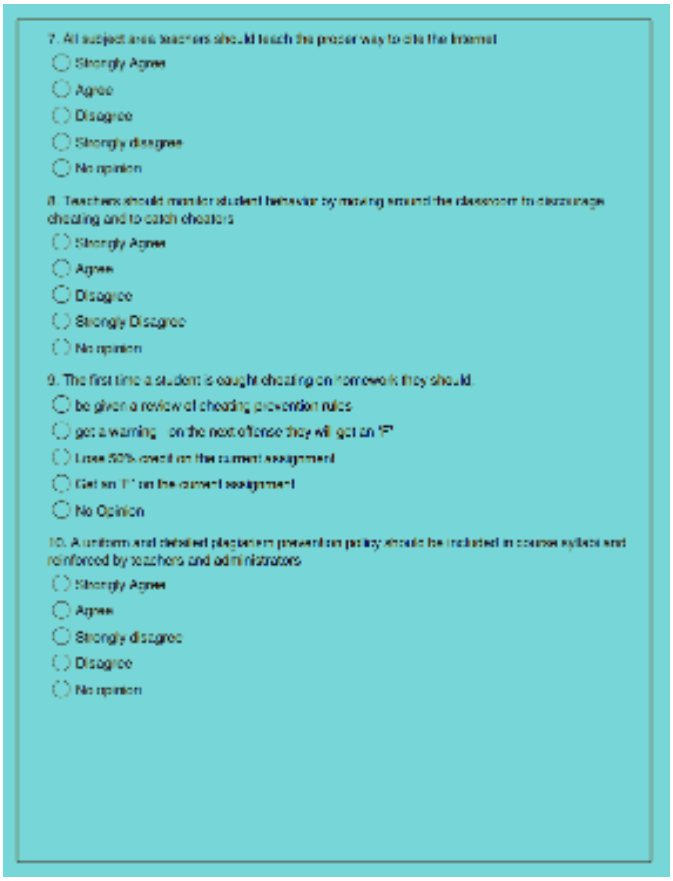


Figure 6. Cheating Management Questionnaire sample page.

Table 5 represents the correspondence between the research questions and the items on the CMQ. The variables are moral-reasoning levels, cheating prevention, and punishment between the in-service and the preservice groups, and within the in-service group.

Table 5

Relationship of Research Questions and Cheating Management Questionnaire items

Research questions	Cheating Management Questionnaire items
1. Are there differences between the in-service and preservice teacher groups on moral reasoning levels and attitudes about cheating prevention and cheating punishment?	7, 8, 10, 14, 12, 17, 18
2. What is the relationship within the in-service group on moral reasoning levels, cheating prevention and cheating punishment?	9, 11, and 15

Measurement:

Cheating Management Questionnaire (CMQ). The CMQ questions and responses were designed to measure the respondents' opinions about the seriousness of the problem of cheating in high school classes and their method of dealing with the problem. The response items were designed to correspond, as a quantitative correlate, to level of seriousness that the respondents attributed to the problem cheating. The same principle was applied to the design and development of question and response items concerning the other two attitudinal variables, the prevention of cheating and the punishment of cheaters.

The response items were assigned values based on the 5-point Likert scale with 1 representing the lowest level and 5 representing the highest value. The scores were totaled with a lowest possible score of 17 and a highest possible score of 85. The responses were categorized according to three variables (seriousness, proactivity, and reactivity). Selected demographic variables, age, gender, years of education, and years of teaching were represented according to individual-participant output.

Validity: Cheating Management Questionnaire (CMQ). The CMQ was developed to assess the attitudes of respondents regarding the scope of the problem of high school cheating and to determine the impact of demographic issues such as age, gender, subjects taught, and years teaching. One goal was to determine whether a meaningful relationship exists between attitudes and conduct in the classroom. Two experts in research methodology reviewed the CMQ. Fifteen in-service high school teachers also reviewed the instrument and evaluated it for content validity. Both groups of reviewers indicated that the questions and response choices were worded clearly. They reported that syntax was consistent from question to question and that they did not feel "led" by the wording. The general response confirmed that the questions and response choices were understandable and that the response items represented a good range of plausible choices.

Reliability: Cheating Management Questionnaire (CMQ). The multi-item Likert-type scale responses were carefully reviewed to assure that respondents had the opportunity to select items that closely reflected their opinion. According to Nunnally and Bernstein (1994) single-item measures have considerably higher likelihood of producing random measurement error, resulting in lower levels of reliability. The multi-item scales were summated and the Cronbach's Alpha was calculated to check for the internal consistency among individual items. The reliabilities for the prevention (.74) and punishment (.77) are based on the sample of teachers used in this study. These figures represent good internal consistency. Nunnally (1978) recommended that instruments used in basic research have reliability of .70 or better. Increasing reliabilities much beyond .80 is unnecessary with instruments used for basic research (Nunnally, 1978, pp. 244–245).

Human-Subjects Approval

Prior to collecting any data, the researcher obtained approval to conduct the study from the Committee for the Protection of Human Subjects at the target institutions and the University of San Francisco IRBPHS. Data for this study were collected in accordance to all rules and regulation of the University of San Francisco's IRBPHS. The researcher conducted the study with the highest ethical standards, following all guidelines set by the IRBPHS in the protection of human subjects in research (see Appendix F). A copy of the USF's human-subjects approval is also be available in the Dean's office, located in the School of Education.

Pilot Procedures

The purpose of pilot testing was "to establish the content validity of an instrument and to improve questions, format, and the scales" (Creswell, 2003, p. 158). The DIT section of the survey was administered to 15 high school seniors in an AP English class to assess whether the test items would elicit the types of responses needed for data analysis. The instrument was piloted to the high school students because that was the only population to which the researcher had easy access at that time. The responses were scored at the Center for Ethical Development at the University of Alabama and the results were reported to the researcher in summary form. The researcher then solicited feedback from the test takers on the content and on the appropriateness of the questions. Although the pilot procedure helped to acquaint the researcher with administration of the instrument, the data derived from the pilot was not especially useful because the sample differed from the target population of the study. That being said, the scores of this high

school student group were consistent with the expected values as indicated by Rest (1986, p. 115).

The CMQ section of the survey was piloted among both preservice teachers ($N = 6$) and in-service teachers ($N = 10$) in January and February 2011 to check for content validity and reliability. This pilot was useful because those surveyed were in the target population and were able to make well-considered critical comments about the questions and responses. This resulted in a winnowing process and a series of changes and revisions were made on both the question and answer items. The most common criticism was that the questions were stated in a way that would make it easy to give socially desirable responses. The actual responses confirmed this problem. In the case of the statement*, It is the teacher's responsibility to punish students who are caught cheating,* with answer choices,

1. Strongly Agree
2. Agree
3. Strongly disagree
4. Disagree
5. No opinion

The response, *Strongly agree,* was selected 100% of the time. As a result, that statement was rephrased and the response item were rephrased as follows,

The first time a student is caught cheating on homework they should _____.

1. Be given a review of cheating prevention rules
2. Get a warning—on the next offense they will get an 'F'
3. Lose 50% credit on the current assignment

4. Get an ‘F’ on the current assignment
5. No Opinion

Data Collection

The researcher used an online service to distribute the survey to collect data for this study. After IRBPHS and district approval, an invitation was sent via e-mail to the target population of teacher-credentialing students and high school teachers. It was necessary to conduct a second mailing to nonrespondents. The e-mail cover letter contained information including (a) a brief explanation of the purpose of the study, (b) the length of time required to complete the survey, (c) the researcher’s contact information, and (d) an explanation of how data and identity privacy will be maintained. SurveyMonkey software was used for online distribution. Preservice and in-service teachers from multiple public school districts and college campuses filled out the survey, a self-reported assessment instrument. Therefore this was not a random, stratified sample of respondents. SurveyMonkey transferred the collected data to the University of Alabama’s Center for Study of Ethical Development for preliminary descriptive statistical processing.

Data Analysis: Defining Issues Test

DIT responses were scored at the Center for Ethical Development at the University of Alabama. That data, along with the CMQ results, were then entered into an SPSS scoring program. SPSS generated descriptive statistics that represented the demographic data. A chi-square test was used to check if statistically significant differences existed between the two groups. *T*-tests were conducted to compare the two groups on the measures of moral reasoning, academic-cheating prevention, and

academic-dishonesty punishment. Intercorrelations were conducted between the three measures for the in-service group alone. In addition, a supplementary analysis on gender differences on the three measures for that group was generated. Because of the small sample size for the preservice teachers, a number of analyses were limited to the in-service teacher group.

Data Analysis: Cheating Management Questionnaire

Participants rated the likelihood of implementing measures to prevent academic misconduct and the likelihood of implementing measures to punish offenders. To investigate whether differences existed between moral-reasoning levels and cheating prevention, an "attitude" score was created based on responses to CMQ Items 7, 8, 10, 14, 12, 17, and 18. These items were categorized as approaches to prevent cheating. Likewise, a cheating punishment attitude score was created based on responses to CMQ Items 9, 11, and 15. These items were categorized as approaches to punish students who cheat. Three independent sample *t*-tests were employed to answer this question. Correlation analyses were conducted by group and among the groups. Because of the lower-than-expected response rate, the sample size for the preservice teachers was relatively small. Therefore, several of the analyses were limited to the in-service group.

Chapter IV

Findings of the Study

Introduction

The data analysis and results of the study are presented in this chapter in six sections: (a) restatement of the problem, (b) description of the participants, (c) description of the findings, (d) data analysis of Research Question 1, (e) data analysis of Research Question 2, and 6) a summary.

Restatement of the Problem

This study dealt with the growing problem of academic dishonesty and investigated the relationship between high school teachers' moral reasoning and their attitudes about cheating. Specifically, the study focused on preservice and in-service high school teachers' cognitive moral-reasoning levels and how those levels compared to (a) the importance that teachers attributed to academic dishonesty, and (b) their readiness to take proactive and reactive measures to counter the problem.

Description of Participants

A total sampling frame of approximately 1,250 high school teachers was contacted and invited to participate in this study. A total of 130 full-time and part-time teachers took the online survey. The response rate for this subset was approximately 10%. A total sampling frame of 180 teacher-credentialing students were contacted and invited to participate in the study. A total of 16 students responded to the invitation and took the online survey. The response rate for this subset was significantly lower than expected, approximately 8%. Of the total number of respondents that started the survey, 68.7% (n = 146) completed it.

Findings

The data analysis is presented in the following order. The demographic data is presented first, followed by the *t*-tests between the two subgroups on the measures of moral reasoning, academic-cheating prevention, and academic-cheating punishment. Intercorrelations between the three measures for the in-service teachers are provided. Because of the small sample size for the preservice teachers, the supplementary analysis on gender differences on the three measures was conducted only on the in-service teacher group. Table 6 provides the demographics for each group. Because of the small number of preservice teachers the *n* column is more informative than the percent column. A fairly even distribution in gender and age can be observed. There is a less even distribution in education level and years teaching. The teaching-subject variable shows fairly even distribution with social studies ranking the lowest with 14.6% and English ranking the highest with 30.8%. The teaching subjects, other than those listed, are grouped in the *other* category. Participants who were not teaching are grouped in the *not applicable* category. The preservice teachers that identified their teaching subject refer to content area of the class at their student-teaching placement. The chi-squares indicate that there were no statistically significant differences between the demographic characteristics of the two groups.

Table 6

Demographic Characteristics of In-service (N = 130) and Preservice Teachers (N = 16)

Characteristic	In-service		Preservice		x^2	*p*
	n	%	*n*	%		
Gender					2.54	.11
Male	56	43.1	10	62.5		
Female	74	56.9	6	37.5		
Age					2.40	.79
20–30	28	21.5	3	18.8		
31–40	31	23.8	1	6.3		
41–50	32	24.6	10	6.25		
50–60	27	20.8	2	12.5		
61 >	10	7.7	—	—		
Not provided	2	1.5	—	—		
Education					4.24	.64
BA	7	5.4	1	6.3		
BA plus professional degree	2	1.5	2	12.5		
BA plus teaching credential	48	36.9	8	50.0		
MA in education	36	27.7	4	25.0		
MA other than education	32	24.6	1	6.3		
EdD	1	.8	—	—		
PhD or other	3	2.3	—	—		
Not provided	1	.8	—	—		
Years teaching					6.31	.27
0–1	12	9.2	2	12.5		
2–3	14	10.8	1	6.3		
4–6	19	14.6	3	18.8		
7–15	52	40.0	3	18.8		
16 or more	32	24.6	7	43.8		
Not provided	1	.8	—	—		

Characteristic	In-service		Preservice		x^2	p
	n	%	*n*	%		
Subject					8.07	.15
English	40	30.8	1	6.3		
Mathematics	19	14.6	6	37.5		
Science	25	19.2	3	18.8		
Social studies	19	14.6	4	25.0		
Other	25	19.2	2	12.5		
Not applicable	1	.8	—	—		
Not provided	1	.8	—	—		

Note. Percents may not add to 100 due to rounding.

Research Question 1

Research Question 1 considered the relationships between moral reasoning and the two attitudinal measures. Research Question 1 read, *What is the relationship between moral reasoning, cheating prevention and cheating punishment?* Moral-reasoning scores were based on responses to the DIT section of the survey; the two-attitudinal measures were based on responses to the CMQ section. This part of the analysis focused on the in-service teachers data. Product moment correlation was the statistic employed and the .05 alpha levels were used for statistical significance (see Table 7).

Table 7

Means, Standard Deviations, Reliabilities, and Intercorrelations for In-service Teachers on Moral Reasoning, Academic Cheating Prevention, and Academic Cheating Punishment (N = 130)

Measure	*M*	*SD*	Reasoning	Prevention	Punishment
Reasoning	44.03	18.91	*.80*		
Prevention	3.32	.37	-.06	**.74**	
Punishment	3.55	.63	-.03	.23*	**.77**

Note. Reliabilities for Prevention and Punishment are in bold type in the diagonal. The reliability for Reasoning is in italics; *$p < .05$

The reliabilities (Cronbach's Alpha) for the prevention (.74) and punishment (.77) scales are shown in bold type in the diagonal and are based on the sample of teachers used in this study. It may be noted that while the correlations with moral reasoning were near zero, there was a statistically significant correlation between prevention and punishment ($r = .23$, $p < .05$). This was expected since both scales are measures derived from the overall construct of cheating prevention/punishment. Aside from statistical significance, the importance of a correlation can be assessed through the effect size. The correlation itself is commonly used as an indicator of importance as follows (Cohen, 1988),

Small effect size: .10

Medium effect size: .30

Large effect size: .50

Neither of the correlations between the two attitudes and moral reasoning approached .10 and thus, for these data, there was no support for the correlations showing importance from an effect-size perspective.

Supplementary analyses on the in-service teacher group were conducted using the demographic variables. No statistical or effect size differences or relationships were found associated with moral reasoning, prevention, or punishment, except for gender. The gender results are provided in Table 8. Observation of the means shows that the female teachers scored higher than the male teachers did on each of the measures. The differences on moral reasoning and prevention were statistically significant ($t(128) = 2.14$, $p < .05$ and $t(128) = 2.55$, $p < .05$ respectively). Both differences can be considered near medium in effect size in respect to importance as described above. The

difference on punishment was not statistically significant. However the effect size (d = .29) is in the small to medium range in importance.

Table 8

In-service Teacher Gender Differences on Moral Reasoning, Academic Cheating Prevention, and Academic Cheating Punishment

	Males (n = 56)		Females (n = 74				
Measure	*M*	*SD*	*M*	*SD*	diff	*t*(128)	Cohen's d
Reasoning	40.00	16.54	47.07	20.09	7.07	2.14*	.37
Prevention	3.22	.39	3.39	.33	.17	2.55*	.46
Punishment	3.45	.70	3.63	.56	.18	1.63	.29

*p < .05

The results for the other demographic variables are provided in Appendix J**.** Although no differences were found associated with age, education, years teaching, and subject taught, the tables in Appendix J provide the analysis of variance for reasoning, punishment, and prevention for each demographic. The p values did not approach statistical significance at the .05 level.

Research Question 2

Research Question 2 asks whether differences existed between the two groups according to three variables: moral reasoning, cheating prevention, and cheating punishment. The moral-reasoning value was based on responses to the DIT; the later two values were based on the CMQ. Research Question 2 stated, *"Are there differences between in-service and preservice teachers' moral reasoning levels and their attitudes about cheating prevention and cheating punishment?"* In order to perform the statistical analysis, a cheating-prevention attitude score was calculated based on responses to CMQ Items 7, 8, 10, 14, 12, 17, and 18. These items were categorized as approaches to prevent

cheating. A cheating-punishment attitude score was calculated based on responses to CMQ Items 9, 11, and 15. These items were categorized as approaches to punishing cheaters.

Three independent sample *t*-tests were conducted to answer this question and the results are shown in Table 9. The .05 probability level is used for statistical interpretation. There was a statistically significant difference between the two groups as to their attitudes about punishment ($t(144) = 3.34$, $p < .05$) with the in-service teachers showing a more stringent attitude ($M = 3.55$) toward punishing cheaters than the preservice teachers ($M = 2.86$).

Table 9

In-service and Preservice Teacher Differences on Moral Reasoning, Academic Cheating Prevention, and Academic Cheating Punishment

	Males (n = 56)		Females (n = 74				
Measure	*M*	*SD*	*M*	*SD*	diff	*t*(128)	Cohen's d
Reasoning	44.03	18.91	34.79	17.51	9.24	1.86	.49
Prevention	3.32	.37	3.23	.48	.09	.81	.24
Punishment	3.55	.63	2.86	.79	.69	3.34*	1.01

*$p < .05$

Statistical significance indicates only that a difference exists and provides no information about the importance of the difference. In addition, statistical significance is strongly dependent on sample size (research (Nunnally, 1978, p. 35). The effect size, an indicator of the clinical or practical importance of a difference, can be used regardless of sample size or whether there is statistical significance. It is a measure of the strength of the relationship between the two groups. Cohen's *d* is often used for this purpose and is

shown in the last column of the table. Cohen's *d* is defined as the difference between two means divided by a standard deviation for the data (Cohen, 1988). In respect to moral reasoning, it can be observed that there was nearly a 10-point difference (diff column, 9.24) between the two groups. The effect size for this difference is .49. One convention for the interpretation of Cohen's *d* is as follows (Cohen, 1988).

Small effect size: .20

Medium effect size: .50

Large effect size: .80

Using the above-referenced values, the difference in moral reasoning (diff = 9.24) was greater for the in-service teacher subgroup than the preservice teacher subgroup, and according to effect size, is in the range of medium importance (*d* = .49). In addition, the difference in the attitude toward the punishment of offenders (diff = .69) is not only statistically significant but can be considered in the *large* (*d* = 1.01) range with respect to importance. The difference in prevention of cheating (diff = .09) can be considered to be in the small (*d* = .24) range in importance. However, the highest score possible on the cheating scale was 4.00. Thus, the means for both groups being above 3 indicates a stringent attitude toward cheating.

Summary

The analysis of data for Research Questions 1 and 2 was reported in this chapter. Noteworthy points are (1) a statistically significant difference between the groups toward punishing cheaters. This difference was not only statistically significant but was considered *large* according to Cohen's d; (b) In-service teachers scored higher on the cognitive moral-reasoning scale. A 9.24-point difference was observed between the two

groups; (c) relationships associated with moral reasoning, prevention, and punishment were observed according to gender. Female teachers scored higher than male teachers on each of the measures. The difference between moral reasoning and cheating prevention were statistically significant; (d) the absence of statistical or effect-size differences or relationships in the association between moral reasoning and age or education level does not confirm the findings of multiple studies that tested this construct. In the following chapter a discussion of the findings, policy implications, and recommendations for future research will be addressed.

Chapter V

Discussion, Implications, Recommendations, and Final Remarks

Discussion

The purpose of this study was to explore the relationship between moral reasoning and cheating prevention from the perspective of preservice and in-service high school teachers. By collecting and analyzing survey data, the researcher was able to identify several unique relationships between and within groups. The outcomes of this study are viewed through a theoretical lens that takes into account Kohlberg's (1969) framework of cognitive moral development and Rest's (1979) four-component model. Based on the DIT results, the researcher identified plausible connections between moral-reasoning levels and attitudes about cheating. The findings represented here illustrate the strengths and weaknesses of the proposed model. The relationship between moral reasoning and each attitudinal variable were hypothesized to be positive, indicating that higher moral reasoning (DIT) scores would correspond to higher CMQ scores. The hypotheses read as follows:

H_1: In-service teachers with higher moral-reasoning scores will be more likely to implement proactive and reactive measures to reduce cheating than in-service teachers with lower reasoning scores.

H_2: Preservice teachers with higher moral-reasoning scores will be more likely to implement proactive and reactive measures to reduce cheating than preservice teachers with lower moral-reasoning scores.

The logic behind the hypotheses was that teachers with higher levels of principled reasoning, as demonstrated when making judgments on the moral dilemmas on the DIT,

would demonstrate similar levels of reasoning when making judgments about the practical dilemmas posed in the CMQ. If this had been the case, there would have been more consistency between higher DIT scores and higher CMQ scores. That outcome would equate to more stringent attitudes about maintaining academic integrity in the classroom. As it turned out, the only positive correlates are listed here:

1. Higher moral-reasoning scores in both groups with higher cheating-prevention scores
2. Higher moral-reasoning scores in the female group with higher prevention and punishment scores.

Beyond that, the hypothesized trend was not observed. The dataset suggests that perhaps the participants who made principled moral judgments in response to the hypothetical DIT dilemmas did not call on the same or comparable moral schema when considering practical judgments about a classroom situation. This point has been noted in the moral-reasoning literature in critiques of Kohlberg's theory and assessment procedures. As noted earlier in this study, Walker et al. (1995) argued that the type of reasoning that Kohlberg was measuring in the MJIs was different from the type of reasoning used in everyday life. Although the dilemmas in the DIT vignettes are not synonymous with practical classroom dilemmas, the difference between making hypothetical judgments and practical judgments is relevant to the interpretation of these findings.

Another possible explanation for this outcome is that teachers' perceived judgment on how they will contend with practical dilemmas in the classroom and how they will actually contend with those dilemmas is different. Wygant (1997) argued that

automatic or "unreflective" reasoning is precluded from consideration. This is particularly telling when considering limitations of the DIT. Wygant wrote,

> In both Kohlberg's (1981, 1984) model and Rest's (1986) four-component version, growth in moral judgment and behavior follows from maturing principled reasoning. Moral actions that are performed automatically or without serious reflection are not examined because they do not emerge from, or depend on, this type of reasoning. (1997, p. 1023)

Assuming that this line of argument is credible, it is possible that the judgments that were rendered without serious reflection were not recognized according to the DIT criterion. If that were the case, those judgments would not be recognized as principled reasoning and would be assigned to the personal-interest and the maintaining-norms level, thereby lowering the mean scores. Although these factors should be taken into account, they are beyond the scope of this study. Additional study would be required to ferret out the reasons behind this finding.

An interesting finding was the statistically significant difference on the attitudes about punishment between the subgroups ($t(144) = 3.34$, $p < .05$). The in-service teachers ($M = 3.55$) showed a more stringent attitude toward punishing cheaters than the preservice teachers ($M = 2.86$). The difference (diff = .69) was statistically significant with a fairly large effect size ($d = 1.01$). Essentially, this means that teachers in the field were less forgiving than teachers who are preparing to enter the field. This outcome might result from the condition that the in-service teacher group have accrued years of experience with cheating and cheaters in the high school setting. When coupling this group's less forgiving attitude with their higher moral-reasoning scores, a positive

correlation seems to exist between the more stringent, less forgiving attitude and higher reasoning levels. This finding compliments the findings of Johnston and Lubomudrov (1987) and Chang (1994).

Johnston and Lubomudrov (1987) found that teachers with higher DIT scores were more democratic in their methods of establishing and maintaining discipline. Those teachers involved students in rule making and tried to engender an understanding the purpose of classroom rules and why they were necessary. Chang (1994) discussed the correlation between high levels of moral reasoning and good classroom practice. In that study, instructors who scored in the principle range on the DIT demonstrated the tendency to accommodate different viewpoints in the classroom. In particular, those instructors helped students understand the issues surrounding ethics, integrity, and academic dishonesty from multiple perspectives (Chang, 1994). Although it is not clear that a more stringent attitude toward cheaters and cheating equates to a more democratic attitude, it does seem plausible that the two traits coexist in that group of teachers.

The difference in cheating-prevention attitudes between the subgroups (diff = .09) and the effect size for the difference is considered to be of small importance (d = .24). However, the highest possible score on the CMQ cheating scale was 4.00 and both groups scored above 3.00, indicating stringency in both subgroups when considering the importance attributed to the implementation of preventative and reactive measures.

It can be observed that there was nearly a 10-point difference (diff. 9.24) in moral-reasoning level between the groups. The effect size for this difference is .49. The moral-reasoning difference was greater for the in-service group than the preservice group. This effect size is of medium importance (d = .49). These results are consistent with

Diessner (1991), who found that both in-service and preservice teachers' principled-reasoning scores generally were in the 40s range. Specifically, in Diessner's literature review on studies that investigated moral reasoning in undergraduate education students and in-service teachers, the undergraduate education student group scored in the 30s to 40s range, whereas the in-service teachers scored in the 40s to 50s range. Those results are consistent with this researcher's findings, although this study concerned graduate education students whereas Diessner's sample was undergraduate education students. Also, Diessner's review of the literature included studies with different design protocols that are not consistent with the present study.

Gender groupings showed a remarkable difference in moral-reasoning levels. Female teachers scored higher than their male counterparts on each of the measures. The differences on moral reasoning and attitude toward cheating prevention were statistically significant ($t(128) = 2.14$, $p < .05$ and $t(128) = 2.55$, $p < .05$ respectively). These findings indicate that female teachers in this group were more stringent and less forgiving than the male teachers. They were harsher in the type of the punishment exacted and in the expedience of exacting the punishment. As an example, female teachers would tend to assign an "F" on the first offense, whereas male teachers would be inclined to give a warning or subtract points on the first offense. This finding is surprising because gender compared to age and education is generally understood as a trivial variable when accounting for variance on measures of moral reasoning. A range of studies using both the MJI and the DIT has found that education is the most powerful demographic variable in predicting DIT scores (Rest, 1979; Rest et al., 1999; Thoma, 1986). Again, it is reasonable to say that a positive correlation may exist between the higher moral-

reasoning levels and the more stringent, less forgiving attitude. The effect size of both differences can be considered of near medium importance (d = .24). The difference in attitudes regarding the punishment of cheaters (d = .29) is not statistically significant but can be considered to be between small and medium importance on Cohen's d.

Supplementary analyses were conducted on age and education variables in relation to moral-reasoning levels in the in-service teacher group. No statistical or effect-size differences or relationships were found. This result stands in stark contrast to earlier findings. The literature identifies several key variables that appear to influence moral judgment among college students. Age and education level appear to be key. Thoma (1986) found that age and education levels were the most powerful correlates to moral reasoning, as measured by the DIT (Rest, 1979). Rest (1986) reported that despite the strong correlation between moral judgment and age, years of formal education had the strongest influence on moral-judgment development. In a later study, Rest (1979) reported that age and education accounted for 38–49% of the variance in moral-judgment scores. Rest and Thoma (1985) administered the DIT with 39 subjects while they were enrolled in high school and then biannually after graduation over a 6-year period. The students were divided into two groups: a "low" group comprised of students with 2 or fewer years of formal education beyond high school and a "high" group with a minimum of 3 years of formal education. At the time of their high school graduation, the two groups demonstrated little difference in principled-reasoning scores (low = score of 33, high = score of 37). Six years subsequent to graduation the low-education group principled-reasoning score was 34.5, while the "high" group scored 51.

This study did not bear out those findings. A possible factor that may have affected this outcome is that the demographic variables of age and education were collected on the CMQ section of the survey instrument. In the studies conducted by Rest and Thoma (1985) the demographic information was collected on the DIT. Differences in the wording of the questions or the order of the items may have biased the respondents' answers. Another factor that may contribute to this discrepancy is the relatively small sample population in the present study. These results may not be representative of larger populations and therefore cannot be generalized.

Implications for Policy and Practice

To better understand the practical implications of these findings, we need to look at the results in the context of Kohlberg's (1969) framework. A significant finding is that moral-reasoning levels, based on DIT mean scores, in in-service teachers was significantly higher than for preservice teacher. To say that in-service teachers' (Group A) mean moral-reasoning score is higher than preservice teachers' (Group B) mean moral-reasoning score indicates that the combination of personal-interest, maintaining-norms, and principled-reasoning levels in Group A represents a percentage of principled thinking than is present in Group B. And yet, even though the 10-point difference is statistically significant between the groups, it indicates only that the in-service-teacher group preferred principled reasoning about 50% of the time. If we accept Kohlberg's (1969) theory that the ideals of justice should be a cornerstone in education and Dewey's (1916) maxim that democracy is a warranted social structure in the classroom, we need to ask how prepared this group of teachers is to establish and maintain a classroom environment that supports social justice and democratic participation.

Public school teachers are subject to an unchanging environment that is highly regulated by social and political forces. Even the teachers in this study with relatively high moral-reasoning scores were inclined to make judgments based on personal-interest and maintaining-norms schema much of the time. When working in highly structured, hierarchical institutions that encourage authoritarian practices, teachers with these levels of reasoning will tend to perpetuate the rules and other mores of the system. According to the Kohlbergian and neo-Kohlbergian framework, regardless of the established norms, teachers at these levels will support the system. It is important to remember that these data do not refer to the case of individual teachers. There may be teachers in these populations that will take principled positions that support well-managed classrooms and high academic standards.

Teachers can take a principled stance even when working conditions seem to be deteriorating. In California, public high school class sizes are moving upward to 40 students per class. A full-time teaching load includes the daunting task of assessing the work of 200 students during a given semester. These circumstances are not conducive to developing deep and trusting relationships with students. Some of the teachers in the present sample may have extraordinary social and pedagogic skills that can accommodate such a heavy caseload. Some of these teachers may have the wherewithal to call upon principled reasoning and routinely make carefully considered decisions when implementing proactive and reactive measures to stem the problem of academic misconduct. Unfortunately, the findings of this study seem to suggest that many teachers will not be able to do that.

Recommendations for Future Research

A number of studies will compliment the current literature on best approaches to counter plagiarism and other types of cheating. There is a need for research on character education and the importance of moral reasoning in teacher education, as Cummings et al. (2007) noted:

> Although concerns about the moral domain of teaching have been expressed for more than 30 years, empirical studies investigating moral reasoning in teacher education students are sparse. Even fewer studies have investigated the effectiveness of educational interventions to advance moral reasoning in these students (p. 76).

A related concern has to do with the reluctance among high school and college faculty to confront students that they suspect of cheating. McCabe (1993) reported that more than 50% of the university faculty surveyed indicated that they make little or very little effort to document cheating infractions. In that study, McCabe found that professors were reluctant to pursue cases of academic dishonesty because they were busy with teaching assignments, research projects, and publishing. They feared confrontation with students, parents, and the administration, and the possibility of litigation and burdensome hearings.

The problems that faculty is facing are compounded by an evolving digital learning landscape where the application of traditional values associated with originality may not always be warranted. Until recently the idea of citing original sources was fairly straightforward. In the age of *hard copy* traditional publishing it was fairly easy to establish copyright infringement. In the digital age, the notions of *cut and paste plagiarism* and *patchwork writing* has complicated the matter. Open access and online

forums encourage participants to reiterate, rewrite, and refurbish published information without acknowledging original sources. In many cases the writer doesn't know where the information originated.

An example of the fluidity of text in the open-access online environment is offered in the article, *Framing Plagiarism* (Adler-Kassner, Anson, & Howard, 2011). The authors investigated information exchange online by conducting a web search on "the safe handling of food." They were interested in public information and how it was being used online. They came across a United States Department of Agriculture (USDA) fact sheet that gave the following instructions: "Never defrost foods in a garage, basement, car, dishwasher or plastic garbage bag; out on the kitchen counter, outdoors or on the porch. These methods can leave your food unsafe to eat (USDA)" (p. 236). The writers found these instructions sufficiently strange and began a search to discover the origin of the instructions. In their quest, they found the information copied verbatim or in slightly altered form on various websites that included universities, cooking sites, food-manufacturing companies, and local-government domains. Some of the sites used the information without attribution and claimed copyright on the content. Other cites included disclaimers saying that it was the readers' responsibility "to verify the content for accuracy and completeness." In one case the information appeared to be copied from another site and was formatted as an article on the safety of eating frozen food. The story became more complex when the authors tried to verify the origin of the USDA information. When searching the USDA site it was impossible to find the actual text or the name of the author. Adler-Kassner et al., wrote,

> Other sites—Currycooking.com, people at the University of Georgia and the University of Colorado, the Philippine cooking organization, and companies like Corex.com, a manufacturer of Italian pastas—also could be the likely author of this text, but they variously claim or disclaim ownership, fiddle with the text or leave it as it is, and in all cases embed it within the rhetorical, informational, and pragmatic goals of their organization. (pp. 237–238)

In the article, *The Dynamic Nature of Common Knowledge,* England (2011) discussed a research project that investigated the use of source material in college essays. The principal investigator was reading though essays and came across an anecdote about a union strike that had become violent. In the course of trying to ascertain whether the anecdote was plagiarized or patch-written, England found four different online versions of the story that were attributed to the same wire service. The author wondered, "Did that count as four sources or as one?" (p. 105). This type of journalism must surely confound instructors who are used to a fixed text and a *hard copy*-notion plagiarism.

Since the mid 20th century literary theorists have studied the ambiguity of the author–reader function. In the 1960s Barthes contended that the text represented more than intentionality, that it was loaded with generations of multiple writings on social, cultural, familial, and intellectual narratives. This thinking concurred with the critical literary concept of *The Death of the Author*. Barthes envisioned the author function roughly equivalent to that of the messenger; the originality of the message was more difficult to ascertain. In postmodern literary theory, the immediacy of the reader's understanding became paramount. The author and the fixed text were relegated to secondary status. In the digital environment some of the more problematic aspects of that

theory are actualized in an environment where text is rapidly composed and recomposed. Differentiating between author and reader and between paraphrasing and plagiarism becomes an arduous if not impossible task. Open access forums such as *wikis* allow for the creation and editing of interlinked web pages via a web browser. *Wikis* nurture and stimulate this newly homogenized literacy and attribute credit to entire communities of author and readers. Research is needed that explores the limits of public knowledge, copyright conventions, and the fair use of the Internet.

Another study with a narrower scope can build on the present study by disaggregating moral reasoning and attitudinal data according to school districts. That study could investigate the relationship between variables such as socioeconomic status, class size, and median household income. An interesting theoretical shift would be to include a qualitative component that focuses on the participants' subjective sensibilities and opinions about the issues surrounding cheating, and how they manage the problem in their specific context. Finally, a correlational study that considers the relationship between the DIT maintaining-norms schema and socially desirable response using an instrument such as the Marlowe-Crowne Social Desirability Scale would be useful (Crowne & Marlowe, 1960).

Final Remarks

During the past decade the problem of high school and college cheating has been become a passionate issue. It seems that a broad swath of the general public has a vested interest in the topic. Dr. Fish (2010), a retired college professor and academic dean, published an editorial column in *The New York Times* on August 9 entitled, "Plagiarism Is Not a Big Moral Deal." The following is an excerpt from that article:

> If you're a student, plagiarism will seem to be an annoying guild imposition without a persuasive rationale (who cares?); for students, learning the rules of plagiarism is worse than learning the irregular conjugations of a foreign language. … It follows that students who never quite get the concept right are by and large not committing a crime; they are just failing to become acclimated to the conventions. (Fish, 2010, p. 12)

Within 48 hours of publication, the article elicited 638 reader responses. Some respondents were in agreement, others in disagreement, but they were largely written with vehemence and even vitriol. The respondents were evenly distributed across professions and academic specialties.

At a time when students report being overly busy and stressed, the option to cheat is tempting, simplified by the expediency of the Internet. Saenz' publication on the problem of cheating exposes the range and scope of academic misconduct. In this case the problem had little to do with students, Saenz (2011) wrote, "Students, of course, aren't the only ones who feel the pressure to cheat. Teachers do, too. Popular books like *Freakonomics* have highlighted the ways in which teachers may alter student's test scores to improve their own assessment ratings (p. 16).

When institutions are identified as having committed unethical behaviors, they are subject to societal disapproval. If the actions are illegal, the problem is litigated in court. When students take shortcuts in disseminating information, it is the teacher who controls the exchange. It is the teacher who decides where the limitations are, and it is the teacher who allocates time to staunch the problem. In the current economic climate, a number of factors conspire against careful monitoring and intervention. In California, as in other

states, class size is increasing while resources are being reduced. The increase in student–teacher ratios corresponds to a decrease in the amount of time teachers can dedicate to assessing the originality of student work.

Apprehending cheaters is an arduous process. The teacher must accuse the student of wrongdoing and follow-up on the accusations. To facilitate that process, an industry of PDS came onto the market that identify plagiarized work. PDS match newly submitted work to a massive corpus of previously submitted work and published texts. The system is a timesaver for teachers and has proven to be an effective deterrent to the unauthorized use of published materials, but a number of negatives are associated with the systems. PDS do not detect customized papers. The customized-paper industry hires full-time ghostwriters and employs sophisticated antiplagiarism detection services to preempt detection.

Another problem is false-positive matches. False matches can produce accusations against the instructor and sully both the teacher's and student's reputations. Possibly the most glaring problem with PDS is the presumption of guilt before malfeasance. The underlying message strikes many as "guilty until proven innocent." With those negative aspects in mind, PDS can serve a circumscribed role when used in accordance with other interventions in a broader program that supports a culture of academic integrity. Wilhoit (1994) lists interventions that compliment the use of PDS. These include,

- Defining and discussing plagiarism in class and online
- Discussing hypothetical cases
- Teaching proper notetaking skills

- Reviewing the conventions for documenting sources
- Requiring multiple drafts of essays and reports
- Requiring students to submit photocopies of documented material
- Providing proofreading and collaboration guidelines.

Establishing trust between student and teacher is key to successful prevention. On the basis of trust, a personal contract emerges. The terms may be that the teacher treats the student fairly and makes a commitment to provide engaging lessons. The student dedicates a chunk of time to attend classes, to master course content, and to earn a grade. Dedication and obligation based on trust can detoxify the murky waters of mistrust between faculty and student.

In order to sustain a trusting classroom environment where students uphold the principles of academic integrity, a system of checks and balances needs to be in place. Emmer, Evertson, and Anderson (1980) studied classrooms that were conducive to academic integrity and determined that starting the school year with clearly defined expectations and procedures resulted in fewer incidents of cheating and disruption. They found that successful teaching and learning took place when teachers developed trusting relations with their students. Based on those findings a fairly strong consensus of opinion emerged regarding the principles of effective classroom management. The principles were (a) the importance of setting and maintaining high social and academic expectations; (b) the establishment of clear rules, procedures, and consequences; (c) the reinforcement of rules, procedures, and consequences through verbal and tangible rewards; and (d) the implementation of instructional activities that maximized student

engagement and accountability (Brophy, 1986). The teacher establishes and maintains the rules while acting as a role model and an example who exemplifies good behavior.

Fenstermacher (1975) wrote, "The teacher's conduct, at all times and in all ways, is a moral one" (p. 133). Teachers are the arbitrators of moral conduct in the classroom. During the final decades of the 20th century a substantial amount of scholarship focused attention on the moral nature of teaching. In more recent years, teacher-education programs have placed greater emphasis on educational ethics and character education (Campbell, 2008). Case studies and moral dilemma discussions have become standard curriculum in teacher-training coursework. The National Council for the Accreditation of Teacher Education and the CCTC have enacted teacher-performance expectations on professional integrity and ethical awareness. These trends are important steps in the process of preparing teachers to set high academic standards and to hold their students accountable for doing honest academic work. The process will be furthered as comprehensive programs are designed and implemented, and foster schoolwide cultures that discourage cheating and reward academic integrity.

References

Academic Writing Help.com (2011). *Academic writing help services.* Retrieved from http://www.academicwritinghelp.net

Adler-Kassner, L., Anson, C. M., & Howard, R. M. (2011). Flaming plagiarism. In C. Eisner & M. Vicinus (Eds.), *Originality, imitation and plagiarism: Teaching writing in the digital age* (pp. 231–244). Ann Arbor: University of Michigan Press.

Arnold, D., & Ponemon, L. (1991). Internal auditors' perceptions of whistle-blowing and the influence of moral reasoning: An experiment. *Auditing: A Journal of Practice & Theory, 10*(2), 1–15.

Bagley, W. (1907). *Classroom management*. New York, NY: Macmillan.

Barthes, R. (1977). The death of the author. In *Image-music-text* (S. Heath, Trans., pp. 142–148). London, UK: Fontana.

Bauman, M. G. (2009). CSI: plagiarism. *Chronicle for Higher Education, 56*(7), B20. Retrieved from http://chronicle.com/article/CSI-Plagiarism/48645/

Bebeau, M. J. (2002). The defining issues test and the four component model: Contributions to professional education. *Journal of Moral Education, 31,* 271–295.

Bebeau, M. J. (2010, June). *The four component model of morality.* Paper presented at the American Bar Association associate dean's conference, Minneapolis, MN.

Bebeau, M. J., & Thoma, S. J. (2003). *Guide for DIT-2*. Minneapolis: University of Minnesota Press.

Benenson Strategy Group. (2008). *Cell phones and cheating in schools: A national poll.* Retrieved from http://www.cbsnews.com/stories/2009/06/18/earlyshow/leisure /gamesgadgetsgizmos/main5095179.shtml

Brandman University. (2009). *Course catalog.* Retrieved from http://www.brandman .edu/catalog/

Breed, F. (1933). *Classroom organization and management*. Yonkers-on-Hudson, NY: World Book Company.

Brophy, J. (1986). Classroom management techniques. *Education and Urban Society, 18,* 182–194.

Brown, E. (1952). *Managing the classroom: The teacher's part in school administration*. New York, NY: Ronald Press.

Campbell, E. (2008). Teaching ethically as a moral condition of professionalism. In D. Narváez & L. Nucci (Eds.), *International handbook of moral and character education* (pp. 601–617). New York, NY: Routledge.

Center for Academic Integrity (1999). *The fundamental values of academic integrity.* Retrieved from http://www.academicintegrity.org/fundamental_values_project /pdf/FVProject.pdf

Center for Academic Integrity. (2011). Retrieved March 6, 2011 from The Center for Academic Integrity website http://www.academicintegrity.org/cai research.asp

Chang, F. (1994). School teacher's moral reasoning. In J. R. Rest & D. Narváez (Eds.), *Moral development in the professions: Psychology and applied ethics* (pp. 71–84). Hillsdale, NJ: Lawrence Erlbaum.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Colby, A., & Kohlberg, L. (1987). *The measurement of moral judgment Vol. 2: Standard issue scoring manual*. New York, NY: Cambridge University Press.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24,* 349–354.

Cummings, R., Dyas, L., Maddux, C. D., & Kochman, A. (2001). Principled moral reasoning and behavior of preservice teacher education students. *American Educational Research Journal, 38,* 143–158.

Cummings, R., Harlow, S., & Maddux, C. D. (2007). Moral reasoning of in-service and pre-service teachers: A review of the research. *Journal of Moral Education, 36,* 67–78.

Cummings, R., Maddux, C. D., Harlow, S., & Dyas, L. (2002). Academic misconduct in undergraduate teacher education students and its relationship to their principled moral reasoning. *Journal of Instructional Psychology, 29,* 286–298.

Cummings, R., Maddux, C. D., Maples, M. F. & Torres-Rivera, E. (2004). Principled moral reasoning of students in education and counseling. *Change & Transformations in Education, 1*, 17–30.

Daniel, L. G., Blount, K. D., & Ferrell, C. M. (1991). Academic misconduct among teacher education students: A descriptive-correlational study. *Research in Higher Education, 32,* 703–724.

Dant, D. R. (1986). Plagiarism in high school: A survey. *English Journal, 75*(2), 81–85.

Derryberry, W. P., Snyder, H., Wilson, T., & Barger, B. (2006). Moral judgment differences in education and liberal arts majors: Cause for concern? *Journal of College & Character, 70*(4), 1–8.

Dewey, J. (1916). *Democracy and education.* New York, NY: Macmillan.

Dewey. J. (1938). *Experience and education.* New York, NY: Macmillan.

Diekhoff, G. M., LaBeff, E. E., Clark, R. E., Williams, L. E., Francis, B., & Haines, V. J. (1996). College cheating: Ten years later. *Research in Higher Education, 37,* 487–502.

Diessner, R. (1991, November). *Teacher education for democratic classrooms: Moral reasoning and ideology critique.* Paper presented at the annual meeting of the Association for Moral Education, Athens, GA.

Drinan, P. (1999). Loyalty, learning, & academic integrity. *Liberal Education, 85*(1), 28–33.

Durkheim, E. (1973). *Moral education* (E. K. Wilson & H. Schnurer, Trans.). New York, NY: Free Press. (Original work published 1925).

Educational Testing Service. (1999). *Cheating is a personal foul. The ETS Ad Council campaign to discourage academic cheating.* Princeton, NJ: Author.

Emerson, R. W. (2010). *Selected journals: 1820–1842.* New York, NY: Library of America.

Emmer, E. T., Evertson, C. M., & Anderson, L. M., (1980). Effective classroom management at the beginning of the school year. *Elementary School Journal, 80*, 219–231.

EncyclopediaBritannica.com. (2011). *Wiki.* Retrieved from http://www.britannica.com /EBchecked/topic/1192819/wiki

Endler, N. S., Rushton, J. P., & Roediger, H. L. (1978). Productivity and scholarly impact. *American Psychologist, 33,* 1064–1082.

England, A. (2011). The dynamic nature of common knowledge. In C. Eisner & M. Vicinus (Eds.), *Originality, imitation and plagiarism: Teaching writing in the digital age* (pp. 231–244). Ann Arbor: University of Michigan Press.

Ercegovac, Z., & Richardson, J. V., Jr. (2004). Academic dishonesty, plagiarism included, in the digital age: A literature review. *College & Research Libraries, 65,* 301–318.

Evertson C. M., & Weinstein C. (Eds.). (2006). *Handbook of classroom management: Research, practice and contemporary issues*. London, UK: Erlbaum.

E World Publishing. (2001). *Paper Masters.* Retrieved from http://www.papermasters .com/real.html

Fenstermacher, G. D. (1975). Reconsidering the reconstruction of teacher education. *Texas Tech Journal of Education, 2*(2), 107–117.

Ferrell, C. M., & Daniel, L. G. (1995). A frame of reference for understanding behaviors related to the academic misconduct of undergraduate teacher education students. *Research in Higher Education, 36,* 345–375.

Fish, S. (2010). *Plagiarism is not a big moral deal.* Retrieved from http://opinionator .blogs.nytimes.com/2010/08/09/plagiarism-is-not-a-big-moral-deal/

Flanagan, O., & Jackson, K. (1987). Justice, care, and gender: The Kohlberg-Gilligan debate revisited. *Ethics, 97,* 622–637.

Fraenkel, J. R., & Wallen N. E. (2003). *How to design and evaluate research in education* (6th ed.). New York, NY: McGraw-Hill.

Freeman, S. J. M., & Giebink. J. W. (1979). Moral judgment as a function of age, sex, and stimulus. *Journal of Psychology, 102,* 43–47.

Genereux, R. L., & McLeod, B. A. (1995). Circumstances surrounding cheating: A questionnaire study of college students. *Research in Higher Education, 36,* 687–704.

Gilligan, C. (1977). In a different voice: Women's conceptions of the self and of morality. *Harvard Educational Review, 47,* 481–571.

Gilligan, C., & Attanucci , N. (1988). Two moral orientations: Gender differences and similarities. *Merrill-Palmer Quarterly, 34,* 223–237.

Goodlad, J. I. (1990). The occupation of teaching in schools. In J. I. Goodlad, R. Soder, & K. A. Sirotnik (Eds.), *The moral dimensions of teaching* (pp. 3–34). San Francisco, CA: Jossey-Bass.

Goodlad, J. I. (1994). *Educational renewal*. San Francisco, CA: Jossey-Bass.

Graham, C., Cagiltay, K., Lim, B., Craner, J., & Duffy, T. M. (2001). *Seven principles of effective teaching: A practical lens for evaluation online courses.* Retrieved from http://technologysource.org/article/seven_principles_of_effective_teaching/

Green, T. E. (1999). *Voices.* Notre Dame, IN: University of Notre Dame Press.

Grijalva, T., Nowell, C., & Kerkvliet, J. (2006). Academic honesty and online courses. *College Student Journal, 40,* 180–185.

Groark, M., Oblinger, D., & Choa, M. (2001). Term paper mills, anti-plagiarism tools, and academic integrity. *Educause Review, 36*(5), 40–48. Retrieved from http://www.educause.edu/ir/library/pdf/erm0153.pdf

Guthrie, B. L., King, P. M., & Palmer, C. J. (2000). Higher education and reducing prejudice: Research on cognitive capabilities underlying tolerance, *Diversity Digest, 4*(3), 10–23.

Howard, R. M. 1999. *Standing in the shadow of giants: Plagiarists, authors, and collaborators*. Stamford, CT: Ablex.

Hunter, J. D. (2000). *The death of character.* New York, NY: Basic Books.

Johnson, L. E. (2008). Teacher candidate disposition: Moral judgement or regurgitation? *Journal of Moral Education, 37,* 429–444.

Johnston, M., & Lubomudrov, C. (1987). Teachers' level of moral reasoning and their understanding of classroom rules and roles. *Elementary School Journal, 88,* 65–78.

Josephson Institute of Ethics. (2010). *Report card on the ethics of American youth.* Retrieved from http://josephsoninstitute.org/surveys/index.html

Josephson Institute of Ethics. (2008). *Report card on the ethics of American youth.* Retrieved from http://josephsoninstitute.org/surveys/index.html

Joy, D. (1986). Some critical adaptations for Judeo-Christian communities. In S. Modgil & C. Modgil (Eds.), *Lawrence Kohlberg: Consensus and controversy* (pp. 401–413). Philadelphia, PA: Falmer Press.

Kennedy, K., Nowak, S., Raghuraman, R., Thomas, J., & Davis, S. F. (2000). Academic dishonesty and distance learning: Student and faculty views. *College Student Journal, 34,* 309–314.

Kohlberg, L. (1958). *The development of modes of moral thinking and choice in the years 10 to 16* (Doctoral dissertation). Available from ProQuest Dissertations (UMI No. 3327832)

Kohlberg, L. (1967). Moral and religious education and the public schools: A developmental view. In Sizer, T. (Ed.), *Religion and public education*. Boston: Houghton Mifflin.

Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *The handbook of socialization theory and research* (pp. 347–480). Chicago, IL: Rand McNally.

Kohlberg, L. (Ed.). (1981). *Essays on moral development*. New York, NY: Harper and Row.

Kohlberg, L. (1984). *The psychology of moral development: Essays on moral development.* San Francisco, CA: Harper and Row.

Kohlberg, L., & Hersh, R. H. (1977). Moral development. *Theory into Practice, 16,* 53–59.

Kounin, J. S. (1970). *Discipline and group management in classrooms*. N.Y.: Holt Rinehart and Winston.

Kounin, J. S., & Gump, T. (1958). The ripple effect in discipline. *Elementary School Journal, 35,* 158–162.

LaBeff, E. E., Clark, R. E., Haines, V. J., & Diekhoff, G. M. (1990). Situational ethics and college student cheating. *Sociological Inquiry, 60,* 190–198.

Landsman, M., & McNeel, S. (2004). Moral judgments of law students across three years: Influence of gender, political ideology and interest in altruistic law practice. *South Texas Law Revie*w*, 45,* 892–915.

Langlais, P. J. (2006). Ethics for the next generation. *The Chronicle of Higher Education*, *52*(19), B11.

Lanier, M. (2006). Academic integrity and distance learning. *Journal of Criminal Justice Education, 17,* 244–261.

Leask, B. (2006). Plagiarism, cultural diversity and metaphor–implications for academic staff development. *Assessment & Evaluation in Higher Education, 31,* 183–199.

Leming, J. (1978). Intrapersonal variations in stages of moral reasoning among adolescents as a function of situational context. *Journal of Youth and Adolescence, 7,* 405–416.

Lickona, T. (1998). Character education: Seven crucial issues. *Action in Teacher Education, 20*(4), 77–84.

Lickona, T. (2004). Character education: Seven crucial issues. *Action in Teacher Education, 20*(4), 77–84.

Love, P. & Simmons, J. (1998). Factors influencing cheating and plagiarism among graduate students in a college of education. *College Student Journal, 32,* 539–551.

Malinowski, C. I., & Smith, C. P. (1985). Moral reasoning and moral conduct: An investigation prompted by Kohlberg's theory. *Journal of Personality & Social Psychology, 49,* 1016–1027.

Martin, R. M., Shafto, M., & Vandeinse, W. (1977). *Developmental Psychology, 13,* 460–468.

Massachusetts Institute of Technology. (2007). Academic integrity: Using the Internet as a source. Retrieved from http://web.mit.edu/academicintegrity/citing/internet.html

Mathison, C. (1998). How teachers feel about character education: A descriptive study. *Action in Teacher Education*, *20*(4), 29–38.

McCabe, D. L. (1993). Faculty responses to academic dishonesty: The influence of student honor codes. *Research in Higher Education, 34,* 647–658.

McCabe, D.L.(1999). Academic dishonesty among high school students. *Adolescence, 34, 681-87*

McCabe, D. L. (2001). *Why students do it and how we can help them stop.* Retrieved from http://www.aft.org/newspubs/periodicals/ae/winter2001/mccabe.cfm

McCabe, D. L. (2005). It takes a village: Academic dishonesty and educational opportunity. *Liberal Education*. Retrieved from http://www.aacu.org /liberaleducation/le-sufa05/le-sufa05feature2.cfm

McCabe, D. L., & Bowers, W. J. (1994). Academic dishonesty among male college students: A 30-year perspective. *Journal of College Student Development, 35,* 3–10.

McCabe, D. L., Butterfield, K. D., & Trevino, L. K. (2006). Academic dishonesty in graduate business programs: Prevalence, causes, and proposed action. *Academy of Management Learning & Education, 5,* 294–305.

McCabe, D. L., & Trevino, L. K. (1993). Academic dishonesty: Honor codes and other contextual influences. *Journal of Higher Education, 64,* 522–538.

McCabe, D. L., & Trevino, L. K. (1996). What we know about cheating in college: Longitudinal trends and recent developments. *Change, 28*(1)*,* 28–33.

McCabe, D. L., Trevino, L. K., & Butterfield, K. D. (2001). Cheating in academic institutions: A decade of research. *Ethics & Behavior*, *11,* 219–232.

Michaels, J., & Miethe, T. (1989). Applying theories of deviance to academic cheating. *Social Science Quarterly, 70,* 870–885.

Miller, J. G., & Bersoff, D. M. (1992). Culture and moral judgment: How are conflicts between justice and interpersonal relationships resolved? *Journal of Personality and Social Psychology, 62*, 541–554.

Morgan, P., & Vaughn, J. (2010). The case of the pilfered paper: Implications of online writing assistance and web-based plagiarism detection services. *PS, Political Science & Politics, 43,* 755–758.

Nadelson, S. (2007). Academic misconduct by university students: faculty perspectives and responses. *Plagiary*, 2(2), 1-19.

Narvaez, D., & Bock, T. (2002). Moral schemas and tacit judgment or how the Defining Issues Test is supported by cognitive science. *Journal of Moral Education, 31,* 297–314.

National Council for Accreditation of Teacher Education. (2002). *Professional standards for accreditation of schools, colleges, and departments of education*. Washington, DC: Author. Retrieved from http://docs.google.com/viewer?a=v&q=cache :y0Riip6G1lgJ:www.ncate.org/

Nunnally, J. C., & Bernstein, I.H. (1994). *Psychometric theory* (3nd ed.). New York: McGraw-Hill.

Pace, J. L., & Hemmings, A. (Eds.). (2006). *Classroom authority: Theory, research, and practice.* Mahwah, NJ: Lawrence Erlbaum Associates.

Palloff, R. M., & Pratt, K. (2005). *Collaborating online: Learning together in community*. San Francisco, CA: Jossey-Bass.

Park, C. (2002). In other (people's) words: Plagiarism by university students—Literature and lessons. *Assessment & Evaluation in Higher Education, 28,* 471–488.

Pavela, G. (1997). Applying the power of association on campus: A model code of academic integrity. *Journal of College and University Law, 24,* 97–118.

Payne, S., & Nantz, K. (1994). Social accounts and metaphors about cheating. *College Teaching, 42,* 90–96.

Piaget, J. (1932). *The moral judgment of the child.* London, UK: Routledge.

Ponemon, L. A. (1992). Ethical reasoning and selection-socialization in accounting. *Accounting, Organizations and Society, 17,* 239–258.

Ponemon, L. A., & Gabhart, D. R. L. (1994). Ethical reasoning research in the accounting and auditing professions. In J. R. Rest & D. Narvaez (Eds.), *Moral development in the professions: psychology and applied ethics* (pp. 101–120). Hillsdale, NJ: Lawrence Erlbaum.

Power, L. (2009). University students' perception of plagiarism. *The Journal of Higher Education, 80,* 643–662.

Pulvers, K., & Diekhoff, G. M. (1999). The relationship between academic dishonesty and college classroom environment. *Research in Higher Education*, *40,* 487–499.

Rabi, S. M., Patton, L. R., Fjortoft, N., & Zgarrick, D. P. (2006). Characteristics, prevalence, attitudes, and perceptions of academic dishonesty among pharmacy students. *American Journal of Pharmaceutical Education, 70,* A1–A8.

Rawls, J. (1971). *A theory of justice.* Cambridge, MA: Harvard University Press.

Reiman, A., & Johnson, L. E. (2003). Teacher professional judgment. *Journal of Research in Education, 13*(1), 4–17.

Rest, J. (1979). *Development in judging moral issues.* Minneapolis: University of Minnesota Press.

Rest, J. (1986). *Moral development: Advances in research and theory*. New York, NY: Praeger.

Rest, J. R., & Narvaez D. (1994). (Eds.), *Moral development in the professions: Psychology and applied ethics*. Hillsdale, NJ: Lawrence Erlbaum.

Rest, J., Narvaez, D., Bebeau, M. J., & Thoma, S. J. (1999). *Postconventional moral thinking: A neo-Kohlbergian approach.* Hillsdale, NJ: Lawrence Erlbaum.

Rest, J., & Thoma, S. (1985). Relation of moral judgment development to formal education. *Developmental Psychology, 21,* 709–714.

Richmond, K. (2001). Ethical reasoning, Machiavellian behavior, and gender: The impact on accounting students' ethical decision making (Doctoral dissertation). Retrieved from http://scholar.lib.vt.edu/theses/available/etd-04252001-131758 /unrestricted/richmond.pdf.prn.pdf

Roig, M. (1997). Can undergraduate students determine whether text has been plagiarized? *The Psychological Record, 47*(1), 113–123.

Roig, M., & Caso, M. (2005). Lying and cheating: Fraudulent excuse making, cheating, and plagiarism. *Journal of Psychology, 139,* 485–494.

Rothstein-Fisch, C., Trumbull, E., Isaac, A., Daley, C., & Perez, A. I. (2003). When "helping someone else" is the right answer: Bridging cultures in assessment. *Journal of Latinos and Education, 2,* 123–140.

Rudestam, K. E., & Newton, R. R. (2007). *Surviving your dissertation: A comprehensive guide to content and process* (3rd ed.). Thousand Oaks, CA: Sage.

Ryan, K., & Bohlin, K. (1999). *Building character in schools.* San Francisco, CA: Jossey-Bass.

Saenz, A. (2011). Catching students (and teachers) who cheat in the 21st century. *The New York Times.* Retrieved from http://singularityhub.com/2011/catching-students-and-teachers-who-cheat

Scanlon, P. M., & Neumann, D. R. (2002). Internet plagiarism among college students. *Journal of College Student Development, 43,* 374–385.

Stavisky, L. P. (1973). Term paper "mills," academic plagiarism, and state regulation. *Political Science Quarterly, 88,* 445–461.

Stevenson, M. (2001). *Adventures in cheating: A guide to buying term papers online.* Retrieved from http://www.slate.com/2059540

Strike, K. A., & Ternasky, P. L. (Eds.). (1993). *Ethics for professionals in education: Perspectives for preparation and practices*. New York, NY: Teachers College.

Stuber-McEwen, D., Wiseley, P., & Hoggatt, S. (2009). Point, click, and cheat: Frequency and type of academic dishonesty in the virtual classroom. *Online Journal of Distance Learning Administration, 12*(3), 1–10.

Szabo, A., & Underwood, J. (2003). Academic offences and e-learning: Individual propensities in cheating. *British Journal of Educational Technology, 34,* 467–477.

Thoma, S. J. (1986). Estimating gender differences in the comprehension and preference of moral Issues. *Developmental Review, 6,* 165–180.

Thoma, S. J. (2002). An overview of the Minnesota approach to research in moral development. *Journal of Moral Education, 31,* 225–246.

Thoma, S. J. (2006). Research using the defining issues test. In M. Killen & J. Smetana (Eds.), *Handbook of moral development* (pp. 67–91). Hillsdale, NJ: Lawrence Erlbaum.

Trevino, L. K., & Youngblood, S. A. (1990). Bad apples in bad barrels: A casual analysis of ethical decision-making behavior. *Journal of Applied Psychology, 75,* 378–385.

Turiel, E. (1983). *The development of social knowledge: Morality and convention*. Cambridge, UK: Cambridge University Press.

Underwood, J., & Szabo, A. (2006). Is information and communication technology fuelling academic dishonesty? *Active Learning in Higher Education, 5,* 180–199.

Vojak, C. (2007). What market culture teaches students about ethical behavior. *Ethics and Education, 1,* 177–195.

Walker, L. J. (1988). The development of moral reasoning. *Annals of Child Development, 5,* 33–78.

Walker, L. J., Pitts, R., Hennig, K., & Matsuba, K. (1995). Reasoning about morality and real-life moral problems. In M. Killen & D. Hart (Eds.), *Morality in everyday life: Developmental perspectives* (pp. 371–407). Cambridge, UK: Cambridge University Press.

West, T., Ravenscroft, S. P., & Shrader C. B. (2004). Cheating and moral judgment in the college classroom: A natural experiment, *Journal of Business Ethics, 54,* 173–183.

Whitley, B. E. (1998). Factors associated with cheating among college students: A review. *Research in Higher Education, 39,* 235–273.

Whitley, B. E., & Keith-Spiegel, P. (2002). *Academic dishonesty: An educator's guide.* Mahwah, NJ: Lawrence Erlbaum.

Wickman, E. (1928). *Children's behavior and teachers attitudes.* New York, NY: The Commonwealth Fund.

Wilhoit, S. (1994). Helping students avoid plagiarism. *College Teaching, 42,* 161–165.

Wilson, R. (1999) Colleges urged to better define academic integrity and to stress its importance, *Chronicle of Higher Education*, 15 October, 46 (8), p. A18.

Wygant, S. A. (1997). Moral reasoning about real-life dilemmas: Paradox in research using the defining issues. *Personality & Social Psychology Bulletin, 23,* 1022–1033.

Yeazell, M. I., & Johnson, S. F. (1988). Levels of moral judgment of faculty and students in a teacher education program: A micro study of an institution, *Teacher Education Quarterly, 15*(1), 61–70.

Appendix A

Sample Defining Issues Test Item

In Europe a woman was near death from a special kind of cancer. There was one drug that doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about $1,000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money on it." So Heinz got desperate and began to think about breaking into the man's store to steal the drug for his wife.
Should Heinz steal the drug? __Should Steal __Can't Decide __Should not steal

Please rate the following statements in terms of their importance.

(1 = Great importance, 2 = Much importance, 3 = Some Importance, 4 = Little importance, 5 = No importance)

__1. Whether a community's laws are going to be upheld.

__2. Isn't it only natural for a loving husband to care so much for his wife that he'd steal?

__3. Is Heinz willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might help?

__4. Whether Heinz is a professional wrestler, or had considerable influence with professional wrestlers.

__5. Whether Heinz is stealing for himself or doing this solely to help someone else.

__6. Whether the druggist's rights to his invention have to be respected.

__7. Whether the essence of living is more encompassing than the termination of dying, socially and individually.

__8. What values are going to be the basis for governing how people act towards each other.

__9. Whether the druggist is going to be allowed to hide behind a worthless law, which only protects the rich anyhow.

__10. Whether the law in the case is getting in the way of the most basic claim of any member of society.

__11. Whether the druggist deserves to be robbed for being so greedy and cruel.

__12. Would stealing in such a case bring about more total good for the whole society or not.

Now please rank the top four most important statements. Put the number of the statement in the blank:

__ Most important item __ Second most important item __ Third most important item __ Fourth most important item

University of Minnesota (Copyright, James Rest, 1979)

Appendix B

Participation Request Email

Dear Mr. Doe:

My name is Michael Glaser. I am a doctoral student in the School of Education at the University of San Francisco and an instructor at Ygnacio Valley High School, MDUSD in Concord, CA. and at Brandman University in Walnut Creek.

I am conducting a research study on preservice and in-service high school teachers understanding of the problem of academic dishonesty at the secondary school level. I am interested in learning about the relationship between the teacher's cognitive moral reasoning and their attitudes toward dealing with academic dishonesty.

You are being asked to participate in this research study because you are enrolled in a single-subject credentialing program or are a high school teacher in the East Bay. If you agree to be in this study, you will be asked to complete an online survey. The survey asks you to rate position statements about ethical dilemmas and asks for your opinion about academic dishonesty in general. To participate in the study, you will need to complete the survey within 10 days.

It is possible that some of the questions may make you feel uncomfortable. You are free to decline to answer any questions you do not wish to answer. You will not be asked to put your name on the survey. Any information submitted on the survey, and your participation will be kept confidential.
No individual identities will be used in any reports or publications resulting from the study. Study information will be coded and kept in locked files. Only study personnel will have access to the files. Individual results will not be shared with any person, college or organization.

While there will be no guaranteed direct benefit to you from participating in this study, the anticipated benefit of this study is a better understanding of how secondary teachers will manage the problem of academic dishonesty in the classrooms.

There will be no costs to you as a result of taking part in this study, nor will you be reimbursed for your participation in this study. If you have questions, you may contact me at glasermg@hotmail.com. Further questions can be directed to the IRBPHS at the University of San Francisco. You may reach the IRBPHS office by calling (415) 422-6091, by e-mailing IRBPHS@usfca.edu, or by writing to the IRBPHS, Department of Counseling Psychology, Education Bldg., University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You are free to decline to be in this study or to withdraw from it at any point.

Sincerely,
Michael Glaser
Doctoral Student, University of San Francisco

Appendix C

Participation Reminder Email

Dear Mr. Doe:

My name is Michael Glaser and I am a doctoral student in the School of Education at the University of San Francisco. Last week I sent you an email regarding a study I am doing on academic dishonest at the secondary level. I am interested in learning about I am interested in learning about the relationship between the teacher's cognitive moral reasoning and their attitudes toward dealing with academic dishonesty in the (future) classrooms.

You are being asked to participate in this research study because you are enrolled in the single-subject credentialing program at Brandman. I noticed that you have not completed the survey yet. If you agree to be in this study, you will be asked to online survey. The survey asks about your academic, personal and social expectations of college. To participate in the study, you will need to complete the survey within 10 days. Please click on the link below to begin the survey.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You are free to decline to be in this study, or to withdraw from it at any point.

Thank you for your attention.

Sincerely,
Michael Glaser
Doctoral Student
University of San Francisco

Appendix D

Consent Cover Letter

Michael Glaser
Doctoral Student

INFORMED CONSENT FORM
UNIVERSITY OF SAN FRANCISCO

Purpose and Background
My name is Michael Glaser. I am a doctoral student in the School of Education at the University of San Francisco and an instructor at Brandman University. I am doing a study on preservice teachers understanding of the problem of academic dishonesty at the secondary school level. Research has shown that increased exposure to the Internet supports a willingness to engage in plagiarism. There is a growing concern that computer-mediated study will continue to diminish the sanctity of protected material. The misuse of published and copyrighted material has become convenient and commonplace. As the cost of technology decreases and information access increases, the problem of academic dishonesty will become an even greater concern for researchers, faculty, policy makers and administrators. I am interested in learning about the relationship between the teacher's cognitive moral reasoning and their attitudes toward dealing with academic dishonesty in their (future) classrooms.
As a participant I am being asked to participate because I am a single-subject credentialing student at Brandman University.
Procedures
If I agree to be a participant in this study, the following will happen:

1. I will complete a questionnaire dealing with the issue of academic misconduct, lasting approximately 5-10 minutes.
2. I will complete a survey that asks me to rate and rank responses to a series of moral dilemmas lasting approximately 20 minutes.

Confidentiality:

1. I will identify myself by the ID provided by the researcher.
2. Though I will not be asked to provide my name, participation in research may mean a loss of my confidentiality.
3. I understand the researcher will keep my records as confidential as is possible.
4. My identity will not be used in any reports or publications resulting from the study.
5. I understand the researcher will keep study information secure in locked files. This will include the demographic questionnaire, and the moral dilemma survey. Only the researcher will have access to the files.
6. Individual results will not be shared with personnel of my institute.

Risks and/or Discomforts

1. It is possible that some of the questions in the demographic questionnaire, interview, or the moral dilemma survey may make me feel uncomfortable, but I am free to decline to answer any questions I do not wish to answer or to stop participation at any time.
2. I may also seek further assistance by contacting
3. Because the time required for my participation may be up to 1 hour, I may become tired or bored.

Benefits

There will be no direct benefit to me from participating in this study. The anticipated benefit of this study is a better understanding of the current body of knowledge regarding preserves teachers' awareness of academic dishonesty at the secondary level. It is further anticipated this study will benefit credentialing programs by investigating moral reasoning and providing moral frameworks during the credentialing process. All individuals who complete the DIT and the CMQ and provide their contact information will be included in a drawing for a $15 gift card. Twenty cards will be awarded. In order to enter the drawing, please include your contact information in the text box below. The Office of Institutional Research will notify winners, who will be randomly selected in the drawing by the end of the spring 2011 semester.

Payment/Reimbursement

I will not be reimbursed for my participation in this study. If I have questions about the study, I may call Mr. directly. If I have further questions or comments about participation in this study, I may contact the IRBPHS, which is concerned with protection of volunteers in research projects. I may reach the IRBPHS office by calling (415) 422-6091 and leaving a voicemail message, by e-mailing IRBPHS@usfca.edu, or by writing to the IRBPHS, Department of Psychology, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.

Consent

I have been given a copy of the "Research Subject's Bill of Rights" and I have been given a copy of this consent form to keep. PARTICIPATION IN RESEARCH IS VOLUNTARY. I am free to decline to be in this study, or to withdraw from it at any point. My decision as to whether or not to participate in this study will have no influence on my present or future status as a single subject-credentialing candidate at Brand Man University. My signature below indicates that I agree to participate in this study.

_____ _____

Subject's Signature Date

Appendix E

Information Sheet

Michael Glaser
Doctoral Student

INFORMATION SHEET ABOUT THE RESEARCH STUDY

My name is Michael Glaser. I am a doctoral student in the School of Education at the University of San Francisco and an instructor at Brandman University. I am doing a study on preservice and in-service teachers' understanding of the problem of academic dishonesty at the secondary school level. Researchers have found that increased exposure to the Internet supports a willingness to engage in plagiarism. There is a growing concern that computer-mediated study will continue to diminish the sanctity of protected material. The misuse of published and copyrighted material has become convenient and commonplace. As the cost of technology decreases and information access increases, the problem of academic dishonesty will become an even greater concern for researchers, faculty, policy makers and administrators. I am interested in learning about the relationship between the teacher's cognitive moral reasoning and their attitudes toward dealing with academic dishonesty in their (future) classrooms.

You are being asked to participate in this research study because you are enrolled in the single-subject credentialing program at Brandman University or a credentialed teacher working at a high school site in the Bay area. If you agree to be in this study, you will complete and submit an on-line survey on an encrypted web-based secure database server. The survey will take approximately 30 minutes to complete.

This study is considered minimal risk to the participant. Some of the questions on the survey may make you feel uncomfortable, but you are free to decline to answer any questions you do not wish to answer, or to stop participation at any time.

Although you will not be asked to put your name on the survey, participation in research may mean a loss of confidentiality. Your responses will be kept confidential to the degree permitted by the technology used. However, no absolute guarantees can be given for the confidentiality of electronic data. No individual identities will be used in any reports or publications resulting from the study. Survey data will be maintained on an encrypted web-based secure database server. The researcher will be unable to remove anonymous data from the database should the participant wish to withdraw it. Within 30 days after the study is completed, the researcher will delete the data, and it will be permanently removed after the last backup cycle is completed. Individual results will not be shared with personnel of your institute.

There will be no direct benefit to you from participating in this study. The anticipated benefit of this study is a better understanding of the current body of knowledge about program development and academic integrity at the secondary level.

There will be no costs to you as a result of taking part in this study, nor will you be reimbursed for your participation in this study.

If you have questions about the research, you may contact me directly. If you have further questions about the study, you may contact the IRBPHS at the University of San Francisco, which is concerned with protection of volunteers in research projects. You may reach the IRBPHS office by calling (415) 422-6091 and leaving a voicemail message; by e-mailing IRBPHS@usfca.edu; or by writing to the IRBPHS, Department of Psychology, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You are free to decline to be in this study, or to withdraw from it at any point. California State University Sacramento, Department of Educational Leadership and Policy Studies is aware of this study but does not require that you participate in this research and your decision as to whether or not to participate will have no influence on your present or future status as an alumni of the Urban Leadership Program.

By completing this survey, you are agreeing to participate in the research.

Appendix F

Research Subjects' Bill of Rights

UNIVERSITY OF SAN FRANCISCO
CONSENT TO BE A RESEARCH SUBJECT

The rights below are the rights of every person who is asked to be in a research study. As a research subject, I have the following rights:

1. To be told the extent to which confidentiality of records identifying the subject will be maintained and of the possibility that specified individuals, internal and external regulatory agencies, or study sponsors may inspect information in the medical record specifically related to participation in the clinical trial.
2. To be told of any benefits that may reasonably be expected from the research.
3. To be told of any reasonably foreseeable discomforts or risks.
4. To be told of appropriate alternative procedures or courses of treatment that might be of benefit to the subject.
5. To be told of the procedures to be followed during the course of participation, especially those that is experimental in nature.
6. To be told that they may refuse to participate (participation is voluntary), and that declining to participate will not compromise access to services and will not result in penalty or loss of benefits to which the subject is otherwise entitled.
7. To be told about compensation and medical treatment if research related injury occurs and where further information may be obtained when participating in research involving more than minimal risk.
8. To be told whom to contact for answers to pertinent questions about the research, about the research subjects' rights and whom to contact in the event of a research-related injury to the subject.
9. To be told of anticipated circumstances under which the investigator without regard to the subject's consent may terminate the subject's participation.
10. To be told of any additional costs to the subject that may result from participation in the research.
11. To be told of the consequences of a subjects' decision to withdraw from the research and procedures for orderly termination of participation by the subject.
12. To be told that significant new findings developed during the course of the research that may relate to the subject's willingness to continue participation will be provided to the subject.
13. To be told the approximate number of subjects involved in the study.
14. To be told what the study is trying to find out;
15. To be told what will happen to me and whether any of the procedures, drugs, or devices are different from what would be used in standard practice;

16. To be told about the frequent and/or important risks, side effects, or discomforts of the things that will happen to me for research purposes;
17. To be told if I can expect any benefit from participating, and, if so, what the benefit might be;
18. To be told of the other choices I have and how they may be better or worse than being in the study; To be allowed to ask any questions concerning the study both before agreeing to be involved and during the course of the study;
19. To be told what sort of medical or psychological treatment is available if any complications arise;
20. To refuse to participate at all or to change my mind about participation after the study is started; if I were to make such a decision, it will not affect my right to receive the care or privileges I would receive if I were not in the study;
21. To receive a copy of the signed and dated consent form; and
22. To be free of pressure when considering whether I wish to agree to be in the study.

If I have other questions, I should ask the researcher. In addition, I may contact the Institutional Review Board for the Protection of Human Subjects (IRBPHS), which is concerned with protection of volunteers in research projects. I may reach the IRBPHS by calling (415) 422-6091, by electronic mail at IRBPHS@usfca.edu, or by writing to USF IRBPHS, Department of Counseling Psychology, Education Building, 2130 Fulton Street, San Francisco, CA 94117-1080.

Appendix G
IRBPHS—University of San Francisco
Approval Letter

February 8, 2011

Dear Michael Glaser:

The Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco (USF) has reviewed your request for human subjects approval regarding your study.

Your application has been approved by the committee (IRBPHS #11-008).
Please note the following:

1. Approval expires twelve (12) months from the dated noted above. At that time, if you are still in collecting data from human subjects, you must file a renewal application.

2. Any modifications to the research protocol or changes in instrumentation (including wording of items) must be communicated to the IRBPHS. Re-submission of an application may be required at that time.

3. Any adverse reactions or complications on the part of participants must be reported (in writing) to the IRBPHS within ten (10) working days.

If you have any questions, please contact the IRBPHS at (415) 422-6091.

On behalf of the IRBPHS committee, I wish you much success in your research.

Sincerely,
Terence Patterson, EdD, ABPP
Chair, Institutional Review Board for the Protection of Human Subjects
---
IRBPHS – University of San Francisco
Counseling Psychology Department
Education Building – Room 017
2130 Fulton Street
San Francisco, CA 94117-1080
(415) 422-6091 (Message)
irbphs@usfca.edu

Appendix H

IRBPHS—Brandman University Approval Letter

BRANDMAN University Chapman University System

February 15, 2011

Michael Glaser
41 Summitridge Court
Pittsburg, CA 94565

Protocol #1008
Project Title: Moral Reasoning Among Pre-Service and In-Service High School Teachers: How Will They Manage Academic Dishonesty in the Classroom?

Dear Mr. Glaser:

Thank you for submitting your application, *Moral Reasoning Among Pre-Service and In-Service High School Teachers: How Will They Manage Academic Dishonesty in the Classroom,* for exempt review to the Brandman University Institutional Review Board (BUIRB). The IRB appreciates the work you and your faculty advisor have done on the proposal. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations that govern human subjects.

Based upon review, the BUIRB has determined that your proposed study is exempt from further IRB review.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised proposal must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a Request for Modification Form to the BUIRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption and require submission of a new IRB application or other materials to the BUIRB.

The goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the BUIRB as soon as possible. If notified, we will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the BUIRB, I wish you success in this scholarly pursuit.

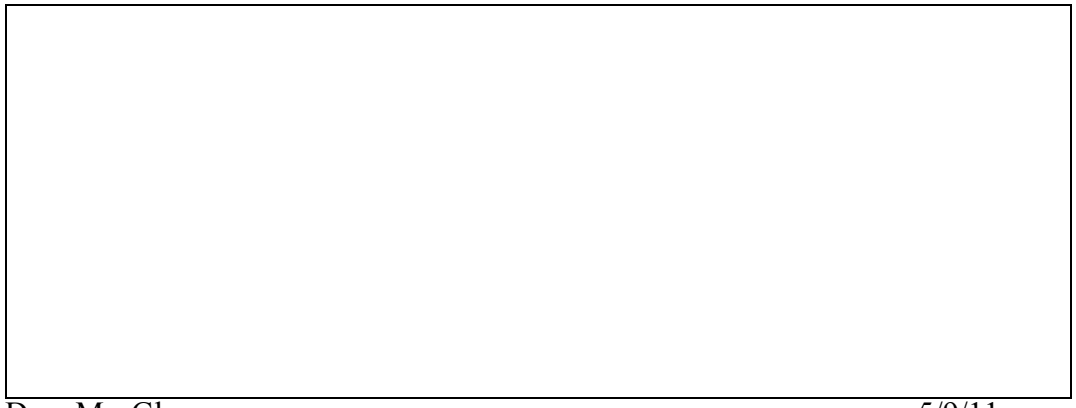
Sincerely,

Michael A. Moodian
Chair, BUIRB

Appendix I

Center for the Study of Ethical Development

Approval Letter



Dear Mr. Glaser, 5/9/11

Dr. T__ wrote, "The invoice indicates the permission for the researcher to use the DIT".

Sincerely yours,

_____

Office for the Study of Ethical Development
305a Carmichael Hall
BOX 870231
The University of Alabama
Tuscaloosa, AL 35487

Appendix J

Tables J1–J4

Means, Standard Deviations, and One-Way Analysis of Variance

Table J1

Means, Standard Deviations, and One-Way Analysis of Variance for Age on Reasoning, Punishment, and Preventative

		20–30		31–40		41–50		51–60		61 >		
Scale	*p*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*
Rea	45.29	15.61	45.26	20.80	47.69	19.37	39.38	18.26	36.67	20.61	1.17	.32
Pun	3.60	.66	3.59	.60	3.51	.63	3.52	.64	3.50	.72	.13	.97
Pre	3.32	.29	3.40	.44	3.24	.32	3.2	.38	3.42	.39	1.05	.39

Note. Rea = Reasoning; Pun = Punishment; Pre = Preventative.

Table J2

Means, Standard Deviations, and One-Way Analysis of Variance for Education on Reasoning, Punishment, and Preventative

	BA		BATC		MA Ed		MA Other		Doctorate			
Scale	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
Rea	46.38	16.21	43.23	18.92	43.38	17.56	45.26	20.74	44.17	27.87	.12	.98
Pun	4.00	.00	3.49	.66	3.68	.55	3.38	.70	4.00	.00	1.81	.36
Pre	3.35	.34	3.26	.38	3.35	.35	3.34	.39	3.41	.12	.50	.73

Note. Rea = Reasoning; Pun = Punishment; Pre = Preventative; BATC = Bachelor's Degree plus Teaching Credential.

Table J3

Means, Standard Deviations, and One-Way Analysis of Variance for Years Teaching on Reasoning, Punishment, and Preventative

		1–1		2–3		4–6		7–15		16 >		
Scale	*p*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*
Rea	42.78	20.09	37.62	20.19	46.22	16.02	44.09	19.15	45.89	19.59	.55	.70
Pun	3.56	.67	3.48	.66	3.55	.59	3.52	.67	3.65	.58	.25	.91
Pre	3.17	.43	3.42	.27	3.49	.27	3.24	.39	3.34	.35	1.10	.36

Note. Rea = Reasoning; Pun = Punishment; Pre = Preventative.

Table J4

Means, Standard Deviations, and One-Way Analysis of Variance for Subject Taught on Reasoning, Punishment, and Preventative

		English		Mathematics		Science		Social studies		Other		
Scale	*p*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*
Rea	45.65	19.69	50.79	18.12	40.93	20.28	46.40	19.01	40.80	16.39	1.04	.39
Pun	3.65	.61	3.49	.52	3.40	.68	3.53	.59	3.61	.72	.71	.5
Pre	3.29	.40	3.25	.33	3.35	.41	3.34	.33	3.34	.32	.31	.87

Note. Rea = Reasoning; Pun = Punishment; Pre = Preventative.