The relationship between cognitive moral development and attitudes toward academic cheating of Armenian high school students at an Armenian private school in Southern California

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Pepperdine University
Graduate School of Education and Psychology

THE RELATIONSHIP BETWEEN COGNITIVE MORAL DEVELOPMENT
AND ATTITUDES TOWARD ACADEMIC CHEATING OF ARMENIAN HIGH SCHOOL
STUDENTS AT AN ARMENIAN PRIVATE SCHOOL IN SOUTHERN CALIFORNIA

A dissertation proposal submitted in partial satisfaction
of the requirements for the degree of

Doctor of Education in Educational Leadership, Administration, and Policy

by

Paramsten Hartounian

June, 2018

Doug Leigh, Ph.D. – Dissertation Chairperson
This dissertation, written by

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under the guidance of a Faculty Committee and approved by its members, has been submitted to
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“The Lord is my strength and shield. I trust Him with all my heart. He helps me, and my heart is filled with joy. I burst out in songs of thanksgiving.”

-Psalm 28:7

This Psalm illuminates the spirit of joyfulness, contentment, thankfulness, and gratification. Not only did I find bliss during this journey, I found rebirth. God gave me strength and created a team of angels who encouraged me through prayer and bolstered me through all the steps in completing my manuscript. A grueling process at times as a result of my health, perseverance was the only word seen by all members of my team who pushed me to go on.

I would like to express a heartfelt thanks to my sagacious Chair, Dr. Leigh, who raised the bar of expectation higher and higher. I would also like to thank the rest of my committee members, Dr. Purrington, and Dr. Arslanian. Thank you for your professionalism, expertise, and genuine and compassionate smiles that kept me going.

To my husband, my miracle boy, thank you for your support, love, encouragement with my professional and intellectual growth, and helping me stay focused by looking through a lens that led me to the end of the tunnel: ACHIEVEMENT!

To my editor Mr. Wartanian, thank you for the countless hours spent reading my manuscript and responding instantaneously, always with patience, dignity, a smile, and support.

To my family and friends, you are angels to whom I give thanks for your energy and effervescence conveyed not only through laughter, but through tears and patience during this process. Thank you for your continuous support, prayers, and love!

Without all of you, I would have never accomplished this journey. I love each and every one of you. AMEN!
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ABSTRACT

Over the past fifty years, cheating among high school students increased substantially and affected the morale of students (Simha, Armstrong, & Albert, 2012). According to a nationally representative survey of 36,000 U.S. adolescents, some 60% of high school students confessed to cheating on a test during the previous school year, and that the behavior among these students had spiked over the past 50 years (Murdock, Beauchamp, & Hinton, 2008). Armenian high school students agree that cheating is morally wrong; however, their actions do not reflect this belief (Bowers, 1964; McCabe & Trevino, 1996; Semerci, 2006). The study aims to address gaps in the literature by using Kohlberg’s (1958) theory of moral development (as cited in Hannah, Lester, & Lester, 2005) to examine how academic dishonesty, such as cheating, is associated with the moral development level of Armenian private high school students in Southern California, and the extent to which, if at all, this relationship is moderated by the degree of students’ performance orientation. No prior research is known to have been done with this specific cultural group in a high school setting.
Chapter 1. Introduction

Over the past fifty years, cheating among high school students increased substantially and affected the morale of students (Simha et al., 2012). According to a nationally representative survey of 36,000 U.S. adolescents, some 60% of high school students confessed to cheating on a test during the previous school year, and that the behavior among these students had spiked over the past 50 years (Murdock et al., 2008). In addition, students’ attitudes, values, and morals were considered the most influential factors of academic dishonesty (Davis, Drinan, & Gallant, 2009). To provide a positive atmosphere for their students, educational institutions sought to establish ethical principles, teach students the difference between right and wrong, and implement appropriate instructions and role modeling (Murphy, 2010).

Academic dishonesty, also referred to as “academic misconduct”, was considered any type of cheating that happened in the context of a formal educational exercise and could lead to one or more of the following: deception, fabrication, plagiarism, cheating on exams, swapping work with other students or purchasing work (Szabo & Underwood, 2004; Patall and Leach, 2015). Academic dishonesty also included falsely changing academic documents, or intentionally obstructing academic work, such as altering a written paper (Hulsart & McCarthy, 2011).

The myriad factors contributing to academic dishonesty included how faculty and students perceived cheating, students’ beliefs about and relationship to academic dishonesty, low levels of self-control, and the peer-pressure students faced in achieving good grades and timely completion of assignments (Tibbetts & Myers, 1999). For example, peer influence was strongly related to the increased rates of academic dishonesty in schools (Tibbetts & Myers, 1999). Cheating on tests led to disparities in the perceived social norms of student behavior (Tibbetts &
Myers, 1999). When a student witnessed others cheating, it increased their own likelihood of cheating.

Academic dishonesty took different forms, some obvious and others less apparent. For instance, some considered working together on homework to be a form of cheating. This case presented different perceptions on the same topic (Pincus & Schmelkin, 2003). Due to such a subjective interpretation of academic dishonesty, students and faculty possessed different perceptions about that which constituted cheating.

Cheating. For the educational system as a whole, student cheating was considered prevalent, if not widespread (Davis et al., 2009). Not a recent phenomenon, student cheating was interrelated to the characteristics, functions, and purposes of education (Davis et al., 2009, p. 36). Romanowski (2008) noted the following elements of cheating behaviors:

(a) Plagiarism or presenting someone else’s work as your own, (b) self-plagiarism or submission of the same work more than once, (c) fabrication of information, (d) providing false information regarding an academic exercise (e.g., falsely claiming to have submitted an assignment), (e) giving or obtaining help in an academic assignment, and (f) any attempt to prevent others from completing their work. (p. 38)

According to Davis et al. (2009), as student cheating in American high schools increased, students admitted to cheating more than any other form of unethical behavior, such as dishonest conduct. According to the Josephson Institute of Ethics which, in 2004, surveyed 24,763 students across 85 U.S. secondary schools with questions pertaining to behaviors from previous years:

- Almost 62% admitted to cheating on examinations at least once, while 38% admitted to cheating two or more times;
• 35% admitted to plagiarism at least once, while 18% admitted they had plagiarized two or more times; and,

• 83% admitted to copying homework from another student once in the previous year, while 64% admitted to doing it two or more times (Davis et al., 2009, p. 36).

The Josephson Institute of Ethics surveyed the students again in 2006. Though the percentages were similar, “almost 11,000 additional high school students (for a total of 35,000) completed the survey. In 2008, only 30,000 students completed the survey (a drop from two years prior), but the figures increased slightly from the 2004 levels” (Davis et al., 2009, p. 42). These surveys showed that “high school students perceive academic cheating to be more acceptable, or at least less morally disagreeable, than other forms of cheating or stealing” (p. 42).

The 2012 survey had over 23,000 student participants from across the U.S. From this sample, 1,177 (5%) disagreed that trust and honesty were essential variables when it came to cheating, while 20,995 (95%) agreed that trust and honesty were essential. The data demonstrated that 20,557 (93%) students reported wanting to please their parents as an important variable to achieving higher grades (Davis et al., 2009).

With high schoolers gave greater importance to strong grades, these students considered moral compromises, such as academic dishonesty, against obtaining a higher competitive standing in school (Puka, 2005). Academic dishonesty – such as cheating, plagiarism, and Internet cheating – was thought of not only as corrupt, but also as jeopardizing the integrity of the education system (Puka, 2005). Schab (1971) recruited 1,629 students from 22 high schools for a study that investigated cheating inside and outside of school. The researcher found that students’ compulsion to cheat may be connected to wanting to succeed, obtaining a goal, and college admission (Schab, 1971).
**Plagiarism.** According to Whitley and Spiegel (2002), plagiarism manifested in various ways such as copying another student’s work or having another student write a manuscript that one turned in as one’s own. Bacha, Bahous, and Nabhani (2012) described plagiarism as a student using cheat sheets, claiming responsibility and ownership for work purchased from another student, extracting sources from someone else’s work and using it as their own, and Internet plagiarism. In each case, plagiarizers claimed as their own the thoughts and work of others (Bacha et al., 2012).

Inaccurate paraphrasing also constituted plagiarisms. According to Whitley and Spiegel (2002), students showed limited knowledge between plagiarized and paraphrased text. Additionally, some students had not learned the basic skills for paraphrasing text and, therefore, were consistently identified as plagiarizing in their writing (Whitley & Spiegel, 2002). In order for students not to plagiarize, it was critical for students to “have the necessary skills, such as how to paraphrase text properly and how to cite source properly” (Whitley & Spiegel 2002, p. 89).

**Internet Plagiarism.** The availability of and access to the Internet marked another formidable source of plagiarism (Anderman & Murdock, 2007). Prior to graduating high school, 80% to 90% of students acknowledged engaging in some form of cheating (Anderman & Murdock, 2007). Internet plagiarism entailed not referencing or erroneously referencing a phrase from an essay or article on the Internet (Bacha et al., 2012). Internet plagiarism not only utilized the property of others without giving credit, but could include paraphrasing, copying, and improper or missing citations (Strom & Strom, 2007).

Students defined the term Internet plagiarism as “copying” and “stealing.” However, Bacha et al. (2012) argued that these students may have been confused about differentiating
between legitimate imitation and plagiarism, and how to correctly attribute the work of others (p. 368). As a result, these differences may not have allowed for consistent standards. For instance, fault could have lied with the instructor if the instructor allowed the student to collaborate in pairs, or allowed a reference sheet during an exam. At the same time, some teachers might have considered this as cheating (Bacha et al., 2012).

**Factors Impacting Academic Dishonesty**

**Personal/Situational Factors.** Several personal and situational factors led to cheating behavior. Personal factors included confidence, age, grades and gender. These variables influenced academic dishonesty and cheating (Teodorescu & Andrei, 2009). Situational factors included sociological and psychological characteristics related to cheating. Examples of situational factors included the classroom environment, chances of success, organizational moral climate, pressure for academic achievement, lack of comprehending the connection between morality and academic misconduct, and fear of failure (Davis et al., 2009, p. 36).

Bernardi, Metzer, and Bruno (2004) discussed how cheating behaviors were impacted by situational factors such that there may have been a relationship between individual moral judgment levels and cheating behavior. Bernardi et al. (2004) observed “a highly significant association among student’ attitudes on cheating, academic integrity, and academic honesty/dishonesty” (p. 406). Their study showed a correlation between cheating behavior and the function of situational factors. The researchers investigated the relationship between perceptions towards cognitive moral development and cheating in a sample of 220 students with 66.4% of the students affirming they cheated in high schools or universities. The Defining Issues Test, Attitudes on Honesty Scale measured attitudes towards cognitive development and cheating. Factor analysis and logistic regression quantified the important “association between
students’ ratings of the importance considerations present in the three scenarios and their estimates of whether cheating would occur” (Bernardi et al., 2004, p. 397).

**Theories of Academic Dishonesty**

In addition to the decline of morals in high school students, there were several other explanations for cheating (Anderman & Murdock, 2007). The fear of failure may have been a key reason that high school students cheated. Gratification, parental pressure, personal experiences, and desiring good grades were other reasons students cheat (Davis et al. 2009).

**Kohlberg’s Moral Development.** The main conceptual framework for this research study was built on Kohlberg’s (1958) cognitive-moral development theory. Kohlberg modified and expanded upon Piaget’s work to articulate a theory that described the development of moral reasoning (Hannah, Lester, & Vogelgesang, 2005). Piaget posited a two-stage process of moral development, while Kohlberg's theory argued that six stages across three different levels underpinned moral development (Hannah et al., 2005). Kohlberg’s extension of Piaget's theory claimed moral development was an ongoing process occurring throughout life (Hannah et al. 2005). Kohlberg grouped six moral stages into three primary levels: pre-conventional level (Stages 1 and 2); conventional level (Stages 3 and 4); and post-conventional level (Stages 5 and 6) (Kohlberg, 1984).

**Goal Orientation Theory.** Goal orientations were originally defined as situated orientations for action in an achievement task. The goal oriented theory originated in the 20th century and focused on academic work or the achievement task (Kaplan & Maehr, 2007, as cited in Shin & Dickson, 2010). “Task goal orientation” and “performance goal orientation” represented two major goal orientation types described in the literature utilized in this study and
have been identified by researchers as pertinent in achievement settings (Anderman & Midgley, 1997).

This theory described a difference between students showing a genuine desire to learn, compassion, and a willingness to comprehend classroom tasks (i.e., tasks of high intrinsic value, strong mastery, or learning goals) versus students taking external success indicators categorized as performance goal-oriented, ego goals, and extrinsic motivation (Kaplan & Maehr, as cited in Shin & Dickson, 2010).

**Approach of Study**

**Problem Statement.** The pervasiveness of academic cheating with current high school students has contributed to most students engaging in some form of dishonest behavior. Murdock et al. (2008) recruited 444 high school students as part of a focus group that measured “individual influences on students’ attributes of blame for cheating and to examine the relationship between students’ attributions of blame for cheating and subsequent cheating behavior” (p. 477). The researchers’ hypotheses were supported by the data that showed how students attributed their cheating behavior to teacher’s characteristics (Murdock et al., 2008). No prior research had been done with this cultural group in a high school setting.

**Purpose Statement.** The purpose of this quantitative, relational study was to explore the relationship between the moral reasoning levels of Armenian private high school students in Southern California and their attitudes toward academic dishonesty, and the extent to which, if at all, this relationship was moderated by goal orientation. The study aimed to address gaps in the literature by using Kohlberg’s (1958) theory of moral development to examine how academic dishonesty, such as cheating, was associated with the moral development level of Armenian private high school students in Southern California, and the extent to which, if at all, this
relationship was moderated by the degree of students’ performance orientation. No prior research was known to have been done with this specific cultural group in a high school setting.

**Research Question.** To what extent, if at all, was the relationship between the moral reasoning levels of Armenian private high school students in Southern California and their attitudes toward academic dishonesty moderated by the degree of students’ performance orientation?

**Research Hypothesis.** It was hypothesized that there would be a positive relationship between high school students’ moral reasoning levels and their attitude on academic dishonesty. Further, it was predicted that this relationship was moderated such that students’ higher performance orientation would strengthen the relationship between moral reasoning and attitude toward academic dishonesty. “Given the rise in self-reported engagement in cheating over the years, it is conceivable that students’ beliefs have shifted from viewing academic cheating as morally reprehensible to merely morally disagreeable” (Davis, et al. 2009, p. 47). When individuals act in a morally reprehensible way, they are inclined to behave more secretly and avoid authority figures. Such individuals “will be less concerned with being ‘found out’ – they will engage in the behaviors more readily and more openly, and they will admit to their engagement more consistently when asked about it on surveys” (Davis, et al., 2009, p. 47).

**Null Hypotheses.** No relationship, or a negative relationship, existed between high school students’ moral reasoning levels and their attitude toward academic dishonesty. Further, this relationship was diminished by students’ performance orientation, strengthened by mastery orientation, or not attenuated by either of these orientations.

**Nature of the Study.** This quantitative, relational study used survey methods to explore the relationship between the moral reasoning levels of Armenian private high school students in
Southern California and attitudes toward academic dishonesty as moderated by the degree of goal orientation. A survey battery collected data regarding demographics and students’ affect regarding these three variables. Data were collected cross-sectionally with moral reasoning, attitudes toward academic dishonesty, and degree of goal orientation measured at the interval level of measurement.

**Operational Definitions.**

*Attitude toward academic dishonesty.* Academic dishonesty is another term for "cheating" when it occurs within the educational system. McCabe's Academic Integrity Survey collected data about the extent of cheating and attitudes toward it (Center for Academic Integrity, 2011).

*Moral reasoning.* Lawrence Kohlberg’s cognitive development of moral reasoning was organized into a sequence of six stages across three levels of morality: pre-conventional, conventional, and post-conventional. The Defining Issues Test 2 (DIT2; Rest, 1974 as cited in Rest, 1999) was used to evaluate the participants’ level of moral reasoning by examining their responses to three moral dilemmas.

*Goal orientation.* Goal orientation theory was a significant theoretical viewpoint on students’ motivation in institutes and a framework on “motivational orientations that contributes to students’ adaptive and maladaptive patterns of engagement” (Kaplan & Maehr, 2007, p. 141). The Patterns of Adaptive Learning Survey (PALS; Midgley et al., 1998) assessed personal goals and the understanding of classroom and/or school goal structures/orientations.

**Key Terms.**

*Academic Dishonesty.* Academic dishonesty is another term for "cheating" when it occurs within the educational system.
**Cheating.** As cited in Simha et al. (2012), Cizek defined cheating as follows:

Cheating is any action that violates the established rules governing the administering of a test or the completion of an assignment; any behavior that gives one student an unfair advantage over other students on a test or assignment; or any action that decreases the accuracy of the intended inferences arising from a student’s performance on a test or assignment. (p. 317)

**Ethics.** Related to or concerned the principles of morality or morals themselves; concerns conduct considered right or wrong (Lathrop & Foss, 2005).

**Internet Plagiarism/Plagiarism.** Students either (1) blatantly copied and adopted others authored work as their own without giving the author credit; (2) inaccurately quoted or referenced citations; or (3) purchased essays from Internet sites (Bacha et al. 2012).

**Moral reasoning levels.** As described below, Kohlberg's model consisted of three levels of moral reasoning, comprising six stages.

*Level I: Pre-conventional Morality.* Found among preschool children, most elementary school students, some junior high school students, and a few high school students. Stage 1: Punishment-avoidance and obedience. Stage 2: Exchange of favors (Kohlberg, 1984).

*Level II: Conventional Morality.* Found among a few older elementary school students, some junior high school students, and many high school students. Stage 3: Good boy/girl. Stage 4: Law and order (typically appears during high school years) (Kohlberg, 1984).

Theoretical Framework. The main conceptual framework for this research utilized Kohlberg’s (1958) cognitive-moral development theory. Kohlberg modified and expanded upon Piaget’s work to form a theory that explained the development of moral reasoning (Hannah et al., 2005). Piaget described a two-stage process of moral development, and stated that he himself “believed that his moral judgment stages are structural in the sense that (1) they represented “structural wholes,” that is, a constellation of traits indicative of global heteronomous or autonomous attitudes toward rules and (2) that they constituted a relatively irreversible sequence” (p. 83). Furthermore, Kohlberg’s theory of moral development detailed six stages across three different levels (Hannah et al., 2005). Kohlberg’s extension of Piaget’s theory proposed that moral development is a continual process that occurs throughout the lifespan (Hannah et al. 2005).

Kohlberg grouped six moral stages into three primary levels: pre-conventional level (Stages 1 and 2), conventional level (Stages 3 and 4), and post-conventional level (Stages 5 and 6; Kohlberg, 1984). The first moral level, labeled the pre-conventional level, concerned children under age 9, some adolescents, and many adolescent and adult criminal offenders (Kohlberg, 1984). The second moral level, labeled the conventional level, was the level “of most adolescents and adults in our society and in other societies” (Kohlberg, 1984, p. 172). The third moral level, labeled the post-conventional level, is “reached by a minority of adults, and is usually reached only after the age of 20” (p. 172).

Importance of the Study. The study aimed to give high school teachers information for raising the awareness of academic expectations for high school students at Armenian schools. To the researcher’s knowledge, no rigorous study had been carried out on academic dishonesty in an Armenian academic context. The study has many implications for educators in private
Armenian schools in North America, South America, Europe, and the Middle East who are interested in developing classroom-based interventions to reduce cheating. This study suggests that effective classroom interventions may curtail cheating in these schools.

Some institutions maintained that certain students will, regardless of its unethical nature, engage in cheating behavior (Bacha & Bahous, 2010). When high school students displayed ethical values, they may be better prepared to honestly confront the world’s challenges (Bates, 2009). Examining high school students' moral reasoning and attitudes on cheating with Kohlberg’s levels of moral development may provide insight into the discrepancy between ethical and unethical behavior. Findings may also be helpful in developing interventions and policies.

**Limitations and Delimitations.** Students who did not want to be identified as people who cheat could respond with dishonesty out of fear of getting caught for honestly responding to the survey (which examines cheating and Internet plagiarism). Thus, students were asked to complete in-person surveys with pencil and paper overseen by an adult volunteer proctor unaffiliated with the school or its extended community. In the surveys, students were asked to rate position statements concerning ethical dilemmas and asked for their opinion about academic dishonesty. Students completed the surveys inside of a classroom. Participants included current high school students at a private Armenian high school in Southern California. Out of approximately 285 high school students between the ages of 14 and 18, a group of 70 students elected to participate in the survey, surpassing the threshold necessary to gain sufficient data for statistical analysis. The researcher, who does not have any role in the specific school site where collection occurred, minimized the limitation of response bias by not linking the surveys to any personally identifiable information. Prior to administering the surveys, the researcher
emphasized the confidentiality of responses to the survey and the need for honest responses. This was achieved through assent and consent forms, and with two announcements from the Vice-Principal over the schoolwide intercom system two days and one day before the survey. The assent and consent forms explained other pertinent elements including confidentiality, and how no individual identities would be used in any reports or publications resulting from the study. The forms also indicated that there were no repercussions for honest responses or withdrawal from the study, and that upon completion of the data collection and data entry, all hard copies (consent and assent documents, survey instruments, etc.) would be destroyed. The remaining data would be maintained in a locked filing cabinet in the primary researcher’s home for three years after completion of the surveys; thereafter, the data will be shredded.

Delimitations to this study included the fact that the subjects were between the ages of 14 and 18, of Armenian ancestral origin, and enrolled in an Armenian private high school in Southern California. Students who agreed to participate in the study were asked to complete surveys in-person. The surveys asked students to rate position statements about ethical dilemmas and asked for their opinions about academic dishonesty. The sample was not truly random, but rather a convenience sampling of participants.

**Assumptions.** High school students may have anxiety about getting caught if they answered truthfully on the academic integrity survey. Guarantees of confidentiality were assumed to encourage truthful responses by the students. The researcher minimized the limitation of response bias by having the students respond to the academic integrity survey. This paper survey was confidential and stressed the anonymity of the survey and sample group. Instruments were appropriate for age, culture, and reading level.
Organization of the Study. This study is presented in five chapters. Chapter one provides the background of cheating, the problem statement, the statement of the purpose, the nature of the student, definition of terms, key terms, theoretical framework, research question, limitations, delimitations, assumptions, research hypotheses and the organization and significance of the study. Chapter two provides the history of academic dishonesty, forms of academic dishonesty, factors impacting academic dishonesty and theories of academic dishonesty. Chapter three discusses the study’s methodology. Chapter four provides data analysis including reliability, normality, and descriptive statistics. Chapter five summarizes major findings and offers conclusions and implications of the study.
Chapter 2. Literature Review

Chapter 2 consists of four sections: the history of academic dishonesty, forms of academic dishonesty, factors impacting academic dishonesty and theories of academic dishonesty.

History of Academic Dishonesty

Davis et al. (2009) stated “the purpose of schooling is not to rid [the] system of cheaters but to work with the student to correct their deviant, yet normal, juvenile behavior” (p. 53). As the deviant behavior began to alter, the individual moved from one of Kohlberg’s stages of moral development to the next. Kohlberg’s framework articulated a group of six stages organized into three major morality levels: pre-conventional, conventional, and post-conventional (Kohlberg, 1984).

Personal integrity has diminished in the education system, especially within high schools (Davis et al., 2009). As a result, “cheating is more tempting if the penalties for failure are higher, if you’re feeling pinched or under the gun” (Davis et al., 2009, p.11). In addition to reduced integrity, Callahan (2004) argued that cheating behavior occurred not only because of a culture unsuccessful in disciplining cheating behaviors, but also because it rewarded dishonesty.

Montor (1971) believed that students engaged in academic cheating because they had never learned why cheating was wrong. Teachers played a major role in contributing to why students cheated in school, even if cheating was discouraged during classroom instruction. Though many students agreed that the topic of cheating had been discussed during instruction, teachers still played a major role in student cheating. When teachers belittled low grades, students often felt that they, not the grade, were being criticized. Many students believed that their teachers failed to publicly praise and privately reprove.
In the 18th century, students cheated in their academics despite the punishment of expulsion from school (Davis et al., 2009). According to Davis et al. (2009), “diploma mills became quite prevalent in eighteenth century, and so students who had been expelled for cheating could easily secure a diploma and misrepresent their educational achievements for the purposes of securing employment” (p.36). Students continued academic cheating through the 19th and early 20th century for the purposes of professional and personal progress (Davis et al., 2009).

The Vietnam War also contributed to cheating at the postsecondary level (Davis et al., 2009). Numerous individuals attempted to avoid the draft by enrolling in postsecondary schools (Davis et al., 2009). Many of these students may not have been qualified to study at the college and university levels, and had little choice but to cheat in order to maintain their grade point averages.

Plagiarism advanced with the rise of term paper mills, an industry in which students purchased and claimed as their own term papers written by service providers. Faculty across the country began reporting a number of students for plagiarism (Davis et al., 2009). At this time, Americans began to value postsecondary education, and “as a result, popular press reports of student cheating exploded in the middle of the last century” (Davis et al., 2009, p. 38). This media attention elevated urgency towards and awareness of the need for change and the influence cheating had on academic performance in colleges and universities (Davis et al., 2009).

In one particular study, Finn & Frone (2004) drafted 315 students from 37 high schools and 3 colleges in Erie County, New York to analyze the connection between academic performance and cheating. The researchers hypothesized “that the inverse relationship between academic performance and cheating is moderated by school identification (represents the extent
to which student feel a sense of valuing and belonging in school) and academic self-efficacy (reflects the extent to which students believe that they are able to successfully perform in school)” (Finn & Frone, 2004, p. 115). While past studies noted an association between school performance and cheating, Finn & Frone (2004) posited that students stressing over grades would more likely cheat than students not stressing over grades. The researchers found that students more likely to cheat had decreased amounts of self-efficacy and self-identification. In addition, underperforming students disconnected themselves from school.

Towards the end of the 20th century, American students cheated in grade schools and throughout their educational career (Davis et al., 2009). From 1969 to 1989, University of Georgia Professor Emeritus Fred Schab surveyed over 4,000 high school students between 1969 and 1989. He observed increasing rates and acceptance of self-reported cheating over that time frame. For example:

- The students who admitted to using a cheat sheet during a test increased form 34% (1969) to 68% (1989);
- Copying another student’s work increased form 58% (1969) to 93% (1979) to 98% (1989); and
- Use of others’ words or ideas without citation, that is, plagiarism, increased from 67% (1969) to 76% (1989; Davis et al., 2009, p. 38-39).

In 1980s California, Davis et al. (2009) studied over 1,000 sixth-graders and 2,000 eleventh-graders and found similar rates to Schab’s, though Davis et al. specifically observed an increase in cheating between grades rather than time. “While only 39% of sixth graders admitted to cheating on the test, 74% of eleventh graders admitted to plagiarism” (Davis et al., 2009).
Among high school students, Strom and Strom (2007) noted the rise of evolving norms and standards with regards to:

Cheating in testing, motivation for student cheating, new forms of deception using technology tools, initiative to protect security of tests, methods students use to obtain papers without crediting, emergence of cyber laws defining offenses and penalties, and rationale for getting parents involved in supporting academic integrity and ethical behavior. (p. 104)

These observations informed Strom and Strom (2007) who researched and confirmed the importance of parent involvement as a necessity in helping develop within students’ moral frameworks and character values. In their study, 1,600 parents of middle and high school students were “surveyed about the relative importance of teaching 11 values relating to character development (Farkas et al. 2002). The value ranked highest, chosen by 91 percent of the parents as absolutely essential to teach their children was ‘to be honest and truthful’” (p. 104). Strom and Strom (2007) concluded that parents who partnered with teachers would help their children by providing at home and at school strengthened instruction on values and ethics. However, Strom and Strom (2007) indicated that their study “revealed a large gap of 36 percentage points between the 91 percent of parents who declared that honesty and truthfulness are fundamental lessons and the 55 percent reporting that their instruction had been successful” (Strom & Strom, 2007, p. 104).

Strom and Strom (2007) suggested that in order to lesson cheating, parents needed to develop a relationship between the teachers and themselves, and present to their children daily lessons in ethics. Additionally, they argued these integrity lessons should belong to the curricula, utilizing different strategies to motivate learning, develop consistent goals and emphasize
achievement based on one’s ethics. According to Strom and Strom (2007), “[the] educator cannot provide all the guidance students require to adopt honesty as a lifestyle. Some parents tell daughters and sons that cheating is a fact of life in the world of work, which has forced them to cheat to succeed” (p. 114). Indeed, parent support helped curtail academic dishonesty and fraud seen among students who educators wanted to steer away from cheating (Strom & Strom, 2007).

Armenia. Armenia is in Eastern Europe and surrounded by Turkey, Azerbaijan, Iran, and Georgia. In A.D. 301, Armenia was the first nation to adopt Christianity. In A.D. 406, Armenians created their own alphabet (Kasbarian, 2000). From 1894 to 1896, Armenians in their ancestral homeland of Anatolia (currently Eastern Turkey) faced widespread slaughter in the hundreds of thousands under the Ottoman Empire’s “red sultan”, Abdul Hamid II. His reign marked the beginning of the end for an empire which became known as “the sick man of Europe.” With the upstart Committee of Union and Progress (CUP) firmly in place after Hamid’s departure, the Ottoman Empire entered World War I. Seeking scapegoats for a state apparatus on the brink of collapse due to land loss, corruption, and war, the CUP blamed its empire’s Armenian population, ordering “a full-scale massacre” that claimed some 1.5 million lives between 1915 and 1923 on the Armenians’ native lands. This event, a historically proven fact actively denied by the Turkish government to date, is known as the Armenian Genocide. Following the genocide, “about twenty–five thousand Armenians fled to the United States” (Kasbarian, 2000, p. 6).

Currently, over one million Armenians reside in the United States with a significant population residing in Southern California. According to Bedros Hajian, some 18,000 out of 200,000 in California’s Armenian population are in prisons facing incarceration for fraud and misconduct (Baghdasaryan, 2007). In general, Armenian parents stress the importance of
academic success through a high grade point average in high school and college (Ghazarian, Supple, & Plunkett, 2008). This dynamic makes pleasing parents and achieving high grades an important characteristic of Armenian communities, particularly in the United States (Ghazarian et al., 2008).

A study conducted by Martirosyan, Saxon, & Wanjohi (2014) recruited 372 Armenian students in public and private academic institutions to investigate “the relationship between student satisfaction and academic performance in Armenian higher education” throughout Armenia (p. 1). ANOVA findings showed significant group differences in relations to the academic performance of students, $F(6, 348) = 3.33, p < .05$, partial $\eta^2 = .054$.

Martirosyan et al. (2014) stated:

In order to determine which satisfaction categories were significantly different, Bonferroni conducted a post hoc test showing that the GPA of individuals unsatisfied with their college experience was significantly different from all other groups at the .05 level. In addition, this group had the lowest mean GPA score in comparison to all other groups. Specifically, these less satisfied individuals had lower academic performances. (p. 6)

**Forms of Academic Dishonesty**

**Cheating.** Cizek (2003) described three substantial components that defined cheating. The first component detailed cheating violations and the comprehension of what established an appropriate and non-appropriate academic activity (Cizek, 2003). The second component stated that cheating not only divided through an ethical frame students who did and did not want to learn, but it also created in learning a “discrimination gain”. This meant that students who cheated had more opportunities to earn higher grades than their non-cheating counterparts.
(Cizek, 2003). The third component, Cizek continued, related to how cheating renders student performance an obscured indicator of progress and “meaning” in the educational process (p. 4). Cheating, Cizek claimed, was “any action that violates the established rules governing the administration of a test or the completion of an assignment; any behavior that gives one student an unfair advantage over other students on a test or assignment” (p. 4).

In the education system, academic dishonesty, cheating and plagiarism were increasingly seen as a pervasive problem (Szabo & Underwood, 2004). Jensen, Arnett, Felman, & Cauffman (2002) recruited 490 students to investigate the “acceptability of an act of academic dishonesty under 19 different circumstances where a person’s motive for transgressing differed” (p. 209). This study found that high school male students considered cheating to be less severe. However, both high school and college students did take into account motives assessing the adequacy of cheating. Additionally, Jensen et al. (2002) noted that academic cheating was prevalent and threatened to erode the ethical foundations of academic life.

Davis, Grover, Becker & McGregor (1992) recruited 6,000 students at large and medium state schools, large and small private schools and two-year schools as part of a focus group investigating the “prevalence, causes, techniques, faculty in institutional responsibility, deterrent measures, and punishment dimensions of academic dishonesty” (p. 16). Davis et al. (1992) examined two possible hypotheses under the dispositional determinant of cheating. The first hypothesis consisted of “cheating from another person’s examination which indicated that women reacted more intensely than men” (p. 18). The second hypothesis consisted of a “different situation [that] engendered different degrees of emotionality” (p. 18). Both of these hypotheses were at least partially validated. Several of the elements mentioned in the article, such as “pressure for good grades, student stress, ineffective deterrents, and condoning teachers,”
were marked as determinants of cheating and could affect students’ academic integrity (p. 19). The researchers agreed that although preventive measures could deter cheating, students needed to internalize a code of ethics supported by faculty.

In the past decade, engaging in a certain form of academic dishonesty such as cheating increased from 40% to 90% (Schmelkin, Gilbert, Spencer, Pincus & Silva, 2008). Additionally, Schmelkin et al. (2008) found at a rate of 50% that academic dishonesty increased from high school to college. “One third of elementary school-aged students report cheating personally and…[they] believe cheating by others is even more frequent” (p. 15). Further, high school students admitted to cheating at greater frequencies than elementary students. In a 1980 survey, Baird showed that “84.5% of students reported cheating in high school and 75.5% reported cheating in college” (Cizek, 2003, p. 13). These studies showed that cheating was less prevalent in elementary school and college, and most prevalent in high school.

Callahan (2004) stated that this “espoused growth in cheating encompasses a wide range of behaviors, such as corporate scandals, the use of illegal steroids by athletes, and plagiarism by journalists and students” (Crittenden, Hanna & Peterson, 2009, p. 338). Callahan (2004) also believed these immoral behaviors resulted from previous unethical acts in the education system. Crittenden et al. (2009) attributed these behaviors “to the economic climate in which values have been both shaped and, ultimately, corrupted” (p. 388). In addition to the connection between cheating and immoral behaviors, Lears (2004) suggested that high school students who cheated on taxes or illegally downloaded music belonged to a “cheating culture” (p. 338).

Crittenden et al. (2009) characterized this cheating culture as one where students accepted cheating behavior and believed cheating necessary for success or achieving goals. Though cheating in educational institutions was not considered a new phenomenon, Crittenden et
al. (2009) pointed out that “cheating is perceived as giving a student a competitive edge and is easily justified by students” (p. 338). The researchers went further, defining individuals who carry cheating culture forward as those who tolerate “cheating behavior,” assert that cheating can “achieve a goal,” and “perceive that everyone around them is cheating in order to succeed” (p. 338).

Slobogin (2002) conducted several studies that showed how high school students who strove to do excellent work while competing for admission to good colleges would cheat, further contributing to a high school culture of cheating (Crittenden et al., 2009). Additionally, Crittenden et al. (2009) conducted a survey by *Who’s Who Among American High School Students*. In the survey, “80% of high-achieving students admitted to having cheated at least once, 50% of the respondents did not believe cheating to be necessarily wrong, and 95% of the cheaters had never been caught. In another study of 18,000 high school students, over 70% engaged in serious test cheating and 50% plagiarized work from the Internet” (p. 338).

Film media has also complemented academic investigations into the dynamics that underpin cheating behaviors. In 2000, Home Box Office (HBO) produced and distributed a feature film about the issue entitled *Cheaters* that told the story of a cheating incident that took place in a Chicago high school. Psychology and behavioral economics professor Dan Ariely at Duke University’s Center for Advances Hindsight discussed cheating in his film *The Honest Truth*. In this film, Ariely described a variety of experiments he and his research team conducted where they investigated incidences of lying. These researchers articulated the impact of differentiation, noting that the effect feels significant when an individual lies for the first time, and lessens in impact as an individual continues to lie over time and does not feel as much the difference between lying and the truth. Ariely and his research team explained how lying can
cause physical changes to brain structures, particularly the amygdala, the brain’s center for emotion processing. Researchers described how the amygdala’s responsiveness lessened the more an individual lied, indicating a neurophysiological adaptation to a kind of emotional numbing that accommodated for lying. Ariely and his team also discussed how a sense of ambiguity can lead to an increase in incidences of lying. They noticed how it became easier for people to rationalize lying if they knew others also lied, underscoring the influence of social factors upon morality. They concluded that lying benefited some who derived a sense of pleasure from the instant gratification involved, contributing to theories of mind developed by researchers (“The (Dis)honesty Project,” n.d.).

Tibbetts and Myers (1997) stated internal punishment (morals) as well as alleged external authorizations “often serve as components of expected costs in evaluations of expected utility regarding deviant acts” (p. 327). Grimes (2004) collected ample evidence – specifically international data – which concluded that student cheating was a behavior that had become evident and acceptable in a myriad of educational institutions. “Evidence indicates that cheating is a common activity in college classrooms both in the United States, Eastern Europe and Central Asia. Numerous students agree though that the consequence of “being caught” and punished is feared. Nevertheless, they believe this act is “socially acceptable” and that students would still engage in academic cheating” (Grimes, 2004, p. 274).

According to Grimes (2004), struggling students had a higher likelihood of cheating to earn passing grades. Ironically, above-average students also cheated, particularly those focused on attaining good grades for college admissions purposes rather than mastery skills. Cheating may begin in elementary school by students who disrupted or tested rules to win against one another in competitive games. However, cheating peaked during high school years when some
three quarters of students affirmed engaging in some sort of academic dishonesty (Grimes, 2004). Ellenburg (1973) enlisted 47 ninth grade students in a general mathematics class as part of a focus group that compared students with GPAs above or below an 85. The findings showed that 38 out of 47 students cheated, with 21 students from the cheating group receiving GPAs above an 85, and 17 students from the cheating group receiving GPAs below an 85. According to the data, the researcher found as a result of “the large percentage of those cheating, that teachers and parents, as well as students, need to take action to change this” (p. 429). With this data, Ellenburg (1973) argued that parents should not only focus on good grades, but stress the importance of learning.

**NCLB and Cheating.** No Child Left Behind Policy (NCLB) Act was a program that assessed students while requiring states to plan school accountability systems. Additionally, “The No Child Left Behind (NCLB) Act codified accountability as our national educational blueprint, requiring schools to increase test scores incrementally so that all students are proficient in reading and math by 2014” (Booher-Jennings, 2006, p. 759). To achieve its intended purpose, this act called for accountability in a school system known for abandoning students who struggled the most (Booher-Jennings, 2006). The educational system demanded schools to exhibit adequate yearly progress (AYP) reports utilizing test scores, but federal legislators debated the definition of student achievement (Dee & Jacob 2011).

Dee & Jacob (2011) recruited fourth and eighth-grade students to investigate “whether NCLB has influenced student achievement based on an analysis of state-level panel data on student test scores from the National Assessment of Educational Progress (NAEP)” (p. 442). The researchers focused on the influence of NCLB and utilized “a comparative interrupted time series analysis that relies on comparisons of the test-score changes across states that already had
school accountability policies in place prior to NCLB and those that did not” (p. 442).

According to NCLB, Dee & Lee (2011) continued, the findings supported an increase in math performance averages for fourth graders and eighth graders (effect size 0.23 by 2007); however, there was no improvement for the subject in reading achievement.

As a result of NCLB, the curriculum was also skewed because of concentration placed upon “subject areas ‘that matter,’ after which significant gains in scores are celebrated, only to realize significant drops in achievement in the neglected subject area(s) at the same time” (Amrein-Beardsley, 2009, p. 4). In addition to the curriculum being skewed, simplifying tests and manipulating cut scores also affected the test takers. According to Amrein-Beadsley (2009), there were two factors that may have explained why a high percentage of students failed:

1. How difficult and unfamiliar the accountability test was, and 2. Where the pass/fail cut score was set. Because it is not politically feasible to fail too many students year after year, over time accountability tests are made easier, cut scores are lowered, and more students pass. This gives the public the false impression that, because of initial high failure rates, the threat of accountability tests worked: the threat of sanctions motivated students to learn more, teachers to teach more effectively, and administrators to adopt better educational programs. (p. 5)

According to Booher-Jennings (2006), in order to support the benefits of high-stakes tests while meeting higher standards, one had to differentiate between elements such as “promoting authentic gains in learning and achievement and the multitude of ways to manufacture artificial student test score gains” (p. 759). “Educational triage” was another term that affected student learning. Educational triage was divided into three categories labeled “safe cases, cases suitable for treatment, and hopeless cases” (p. 758). Resources were rationed “to focus on those students
most likely to improve a school’s test scores” (p. 758). The focus of an educational triage was to help schools’ scores increase, but at the expense of the student. Since the stakes were high, and since districts continued to pressure schools to meet AYPs, proper student education was sacrificed. Some students faced retention, while other students were denied an appropriate education (Booher-Jennings, 2006).

Additionally the term “data,” or “data-driven,” had also influenced educational policy. Data-driven decisions identified “the needs of each individual child” and introduced “interventions to remediate any learning difficulties” (Booher-Jennings, 2006, p. 757). However, teachers had been torn between expectations of the administration and their own expectations with the relentless “pressure to increase tests scores,” which was seen as a prominent resource to validate curricula. For example, teachers allowed students to use “additional time in class, utilizing the literacy coach in enrichment sessions, helping the students during test-taking and tutoring after-school, Saturday, and in the summer” (p. 757). At one particular elementary school, Booher-Jennings (2006) stated, “data-driven obscures, neutralizes, and legitimates a system of resource distribution that is designed to increase passing rates rather than to meet the needs of individual students” (p. 757).

As a result of NCLB, Houston was venerated as a model for this educational reform which was pushed nationwide (Pacopella, 2007, p. 20). It was communicated to the rest of the world that this district not only increased graduation rates, but also reduced the achievement gap and high-school drop outs. However, according to Pacopella (2007):

These claims were false--many of them, maybe all of them, depending on whose ‘data’ one believes in the massive misrepresentations and blatant lies. The readings on this debacle are depressing, informative, and important if we want to really learn from the
‘Texas Miracle’ and ensure the rest of the country doesn't continue down this slippery slope (e.g., Amrein & Berliner, 2002; Leung, 2004; Dobbs 2003; Haney, 2000; Schemo, 2003). (p. 20)

According to Booher-Jennings (2006), despite the stated purpose of NCLB, schools continued to neglect those students considered on the “bubble” in terms of performance. Educators falsely inflated scores in order to exclude students from taking high-stakes tests. Students were thus placed in categories not reflective of their true standing, including special education programs. Many students were held back a grade to suspend test taking, “diverting attention away from subjects not evaluated on high-stakes tests, teaching to the test, and cheating” (Booher-Jennings, 2006, p. 759).

School administrators and teachers felt the burden and pressures related to increased emphasis placed on testing. As a result with the connection of “stronger accountability testing,” cheating became more prevalent in schools (Amrein-Beardsley, 2009, p. 4). Due to the significant and increased punishment upon underperforming schools, employees deviated from honesty during tests.

According to Amrein-Beardsley (2009), cheating occurred during these accountability tests in numerous ways. A teacher could allow students more time to complete a test than was prescribed; walked around the classroom providing students with hints, clarifications, definitions, or answers; told students to rethink particular questions if the teacher saw incorrect answers; and some were caught manually correcting students’ answers on accountability test score sheets.

In addition to the different ways teachers helped students cheat during accountability testing, administrators also played a pivotal role. According to Amrein-Beardsley (2009),
administrators continuously briefed teachers by sharing information such as accountability test content, distributing the “secure test” as a sample test, and transforming low-performing students’ scores by altering their identification numbers to make the score sheet unacceptable. This ultimately effected net results by eliminating the students score from the amalgamated statistics.

Administrators have also been reported for employing “test-boosting consultants” who focused on students with a chance of increasing scores or passing accountability tests. Additionally, as a result of limited influence to the composite test reports, low-scoring students did not receive efficient instruction; rather, they were ostracized (Amrein-Beardsley, 2009). Equally, administrators might have focused on only the students considered the “high score” test takers and encouraged them to partake in increasing the overall test scores of the school.

According to Pascopella (2007), incidents such as “bogus data, illegal test preparation, blatant cheating, manipulated statistics, underreported dropout rates are examples of corruption that have been linked to [the] NCLB act” (p. 20). The most evident example of this exploitation was the 2002 “Texas Miracle” incident at Houston Public Schools, a system that made principals and administrators accountable for student performance, and Best Urban School Districts by the Broad Foundation in 2003 (Pacopella, 2007, p. 20). This was publicized by former President Bush and “Houston superintendent and now former Secretary of education, Rod Paige, who about a year ago referred to the National Educational Association as ‘terrorists’” (Pascopella, 2007, p. 20).

In order to meet the achievement quota, under the No Child Left Behind Law, numerous school districts and states were accused of cheating on test scores. For instance, reports of manipulation of test scores exploded throughout the country (Pascopella, 2007, p. 20).
Representative George Miller, currently the chair of the House of Representatives Committee on Education and the Workforce, stated that “the cheating issue ‘ought to be part of the mix’” (p. 20). However, spokesman Tom Kiley disagreed with Mr. Miller’s comment, stating, “any cheating is going to undermine the core goal of the law, which is accountability and making sure that every student is proficient” (p. 20).

Cheating or test violations such as poorly-designed test rules, extended test times, and providing calculators for math were reported for the last 15 years. Districts like the Camden School District “developed a security plan to block ‘adult interference’ in testing” which “includes rigorous training for test administrators, more monitoring, and more attention to handling test booklets” (Pascopella, 2007, p. 20). Though some districts continued to protect their students by not cheating on high-stakes testing, others showed disproportionately vast gains in student learning as a result of cheating on high-stakes testing (Pascopella, 2007).

**Public, Private and Faith-Based Schools.** Public, private, and faith-based schools were held accountable regularly through annual academic achievement tests and reports. According to Kennedy (2006), cheating occurred at public, private and faith-based schools. As a result, “public schools impose Other’s morality on ‘us’. And ‘real Americans’ who were patriotic, religious, and moral-as opposed everyone else-were suffering” (Apple, 2000, p. 70). These school types differed in that private and faith-based schools had less cheating for some of the following reasons: (a) Private schools did not have to teach to standardized tests the way public schools did (NCLB); (b) Private schools chose their own curricula (State Academic Standards). It was not determined by the state or other authorities; (c) Strict codes of conduct.

Though public, private and faith-based schools had mutual accountabilities and responsibilities for students, they did show variance. For instance, public school students were
protected by the No Child Left Behind (NCLB) Act. This act assessed students and required “states to plan school accountability systems” and “codify accountability systems” such as the “national educational blueprint, requiring schools to increase test scores incrementally so that all students are proficient in reading and math by 2014” (Booher-Jennings, 2006, p. 759). According to Apple (2000):

The sources of educational problems are multiple: teacher education institutions produce teachers who are unprepared academically and unskilled in teaching the ‘basics’; state funded (public, in the US sense of the word) schools have been taken over by ‘progressive’ models of teaching that are unworkable; these same schools do not teach ‘traditional’ cultural and religious knowledge, beliefs, and values; and public schools do not listen to conservative parents and are much too bureaucratic. (p. 61)

In addition to assessing students, legislation required public schools to teach to the test such that minimum test scores represented achievement. Public schools measured accomplishments by benchmarks which were imperative to the battery total (Kennedy, 2016). For example, unscrupulous teachers and administrators in Philadelphia schools were suspected to have “cooked the books” in their district. “And they got caught. A similar situation occurred in Atlanta's public schools with several educators jailed for their role in a wide-spread cheating scandal” (Kennedy, 2016, p. 1). Conversely, Apple (2000) said that despite their inadequacies, public schools offered a type of social cohesion “that public schooling and the teaching and curricula found within it became central targets of attack” (p. 70).

The first factor differentiating private schools from public schools was that private institutions were not obligated to teach to the test, which meant they were not covered by NCLB or its “replacement legislation to the Every Student Succeeds Act” (Kennedy, 2016, p.1). Private
schools were not funded by the government, and were instead controlled by the students’ parents. A parent dissatisfied with their private school could remove their child and transfer them to a different school at their convenience (Kennedy, 2016). Public schools, Apple (2000) stated, “are seen as dangerous places. These schools were institutions that threatened one’s very soul. Temptations and Godlessness were everywhere within them. God’s truths were expunged from the curriculum and God’s voice could no longer be heard. Prayers are not illegal and all of the activities that bound my life to scriptural realities were seen as deviant” (p. 70).

The second factor differentiating private schools from public schools was academic standards. Private schools utilized their own choice of curricula. States did not control or take responsibility for these school’s curricula (Kennedy, 2016). In private, public, and faith-based schools, the state education department mandated all “high school graduates to have a certain number of credits in core subject areas. But how those core subjects or any other subjects are taught is entirely up to the school” (Kennedy, 2016, pg. 1). In private schools, educators urged parents to choose an institution that allowed student to be taught with teaching methods and curriculum parallel to the parents’ educational philosophy (Kennedy, 2016).

The third factor differentiating private schools from public schools was the zero tolerance policy regarding cheating. In most private institutions, the faculty and administration put in great effort to implement the importance of ethical behavior. Therefore, under the zero tolerance policy, students could be subjected to expulsion if caught cheating. This was an effective means of punishment due to the fact that most students imitated the actions of others. Based on this, it was evident that private schools took extreme measures to ensure students received a proper education and grasped the importance of morality. The predominant objective of private schools was to “shape the character of their students” (Kennedy, 2016, pg. 1). The rules and regulations
within the schools were modeled based on the laws citizens must follow within the community. To be an ethical adult, it was crucial for children to learn early on the differences between right and wrong, good and bad. Appropriately implementing these values created individuals who were morally responsible for their actions, both inside and outside the school community.

Although private schools exercised zero tolerance policies, cheating could still occur. For instance, Harvard-Westlake, a private school in Los Angeles highly acclaimed for its academic record and reputation, endured a “cheating scandal” in which “six sophomores were expelled and more than a dozen other students faced suspensions” (Rivera, 2008). This example illustrated how cheating could occur even among the highest-ranked students in a top-tier institution. According to Rivera, (2008), the cheating scandal “tainted the most precious and valued aspect of the school.” This demonstrated how even the highly regarded institutions could lose credibility based on a single act of dishonesty and moral misconduct. Faith-based schools had many advantages such as “parents [who] can control destructive influences such as various temptations, false teachings (including secular humanism and occult influences of the New Age movement), negative peer pressure, and unsafe environments” (Apple, 2000, p. 71).

Academic integrity was a widely studied topic due to the effect it had on the students and the institutions to which they belonged. One such study was conducted by the Josephson Institute of Ethics, in which high school students were surveyed regarding their cheating behaviors. According to the national survey on the Ethics of American Youth, “60% of students said they had cheated on a test, and one in three used the Internet to plagiarize” (Rivera, 2008). This data indicated the presence of a cheating culture among American youth, and thus portrayed a habit of unethical and dishonest behavior established by these young individuals.
These variables that influenced academic dishonesty were tested in a research study conducted on students enrolled in a faith-based university. Although the students were not at the high school level, studying college students could display how these factors played a role in the youth after high school graduation. The objective of this experiment was to study the effects of personal and situational variables on cheating behavior. This study tackled the following matters: “(1) the role of cheating culture in determining cheating behavior, (2) the mechanism of action by which neutralizing attitudes cause cheating, and (3) the differences in causes of dishonesty behavior in varying situations” (Rettiner and Cramer, 2008, p. 123). Among the data collected for the 139 undergraduate students, the findings indicated the following: plagiarism was a more common form of cheating than exam cheating, and grade/extrinsic motivation was typically a cause of academic dishonesty. Those students whose main objective was to solely earn a high grade were found more likely to cheat, thus indicating a positive correlation between the two.

A striking finding that also revealed a positive effect on academic dishonesty was the relationship between witnessing another student cheat and future cheating. The study indicated that students who witnessed others cheat were more likely to participate in similar dishonest behavior, believing it was appropriate to do so since others were. Based on this belief, it was crucial to thus create an environment of integrity, morality, and ethical obligation. Rather than using their peer’s dishonesty as justification for their own unethical behavior, students could have been required to report any cheating they saw. Doing so would result in lower cheating rates due to the fact that students “will be reluctant to cheat” (McCabe et al., 2001).

In faith-based schools, a student’s religion and belief system positively correlated to their inclination to behave ethically (Giorgi and Marsh, 1990). Research indicated that students attending schools affiliated with a religion tended to cheat less in an effort to uphold their ethical
practices (Kennedy and Lawton, 1996). Students at faith-based institutions found academic dishonesty to be unethical, and therefore did not partake in any practices that opposed their belief systems. Data displayed the relationship between religion and ethics, showing that “more religious students were significantly less likely to engage in unethical test taking practices” (Woodbine and Amirthalingam, 2013, p. 143). Therefore, based on significant research, students at public institutions were more likely to find cheating and academic dishonesty to be acceptable than those students at private, religious institutions (Molnar et al., 2009). Students at private, religious institutions found cheating unacceptable due to their faith and belief system. Undoubtedly, an individual’s ethical beliefs and moral values related to academic integrity and played a critical role in the relationship between beliefs and dishonesty.

**Plagiarism.** Walker (1998) noted how institutions that did not consider plagiarism a vital component of ethical demands not only overthrew the “entire system of course evaluation, but casts doubt on the validity of qualifications and disadvantages students” (p. 90). The amount of student cheating and plagiarism may have been evident and apparent globally. For example, on North American campuses, students confessed that cheating could be wrong, but it has not stopped them from, at a minimum, engaging in the activity once during their high school or college years (Livisky & Tauber, 1994 as cited in Walker, 1998).

Student plagiarism typically entailed unacknowledged copied material from a source text (Wilhoit, 1994). Variations on this form of plagiarism included acknowledging a source and disguising a direct quote as a paraphrase, or paraphrasing from a source without any acknowledgement (Wilhoit, 1994). Copying material from a fellow student, having a term paper "ghost written," and "self-plagiarism" or "recycling" (i.e., submitting an assignment twice for
two different courses) may also been regarded as variants of student plagiarism (Hawley, 1984; Wilhoit, 1994 as cited in Walker, 1998, p. 90).

Other methods of student cheating included but were not limited to copying correct answers from cheat sheets hidden under the desk, in sleeves or in other clever hiding places; cheat notes written on limbs, clothing or other belongings; receiving cell phone texts or emails; copying from a student next to the cheating student; and using graphic calculators or other tools including cell phones that show data in seconds while remaining hard to see for instructors (Bacha et al., 2012). Some students purchased test results from students that had already taken the test in prior academic school years. Others may have even stolen exam questions from administrative offices in order to have advanced access. The boldest of students attempted to enter school computers to alter their grades and academic record. These were forms of test fraud (Bacha et al., 2012).

McCabe (1999) researched academic dishonesty and student plagiarism among 32 high school and college students, using focus group discussions to comprehend principles underpinning academic dishonesty. The findings showed that certain students considered cheating an acceptable norm, confirming the study’s hypothesis. Additionally, McCabe (1999) stated, “while the level of pessimism among students about what can be done to reduce cheating is disheartening, equally discouraging is the failure to give them greater responsibility for achieving that goal” (p. 686). McCabe (1999) also observed the increasing rate of cheating among high school students who failed to take ownership for their actions, instead placing responsibility with parents, teachers, schools and society writ large. Further, student plagiarism and cheating was considered immoral because it violated veracity in the classroom (West, 2004).
In addition to investigating students’ beliefs and relationship to academic dishonesty, Tibbetts and Myers (1999) researched the link between student cheating, low self-control and peer behavior. Their study found that students felt a high incentive to cheat, especially due to peer behavior. Cheating on tests lead to disparities in the perceived social norms of student behavior. When a student witnessed others cheating, the researchers asserted, it could increase his or her own likelihood to mimic the behavior. Additionally, peer influence was strongly related to increased rates of academic dishonesty in schools (Tibbetts & Myers, 1999).

Carrell, Malmstrom, and West (2008) distributed 4,900 surveys to a random sample of students from the United States Military, Naval, and Air Force academies to investigate the “peer influence in academic cheating” (p. 195). These anonymous surveys were collected through mail from 1959 to 2002 and found “positive peer effects in academic cheating” and that “one new college cheater is created for every two to three additional high school cheaters admitted to a service academy” (Carrell et al., 2008, p. 195). Additionally, according to a study conducted by Alschuler & Blimling (1995), students cheated based on social norms, their perceived benefits and costs, and individual factors (see Table 1).
Table 1

Summary of Reasons Why Students Cheat

<table>
<thead>
<tr>
<th>Supportive Norms</th>
<th>Benefits</th>
<th>Costs</th>
<th>Individual Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Everyone else is doing it.</td>
<td>• Cheating will help me get better grades.</td>
<td>• There’s no reason not to cheat.</td>
<td>• Age</td>
</tr>
<tr>
<td>• If I help someone else cheat, they will help me.</td>
<td>• It requires less effort than actually studying.</td>
<td>• There is little to no chance of getting caught.</td>
<td>• Gender</td>
</tr>
<tr>
<td>• Peer pressure – others will think I am weird if I do not cheat.</td>
<td>• My parents would be upset if I got bad grades.</td>
<td>• The punishment is minimal if caught.</td>
<td>• Extra-curricular activities</td>
</tr>
<tr>
<td>• Professors don’t try hard enough to catch cheaters.</td>
<td>• If I don’t cheat, I’d be at a disadvantage compared to those who do cheat.</td>
<td>• Cheating doesn’t hurt anyone.</td>
<td>• Work ethic</td>
</tr>
<tr>
<td>• There are many opportunities to cheat.</td>
<td></td>
<td></td>
<td>• Level of self-esteem</td>
</tr>
</tbody>
</table>


Leveque & Walker (1970) recruited 366 boys with a mean age of 15.90 to investigate incidences of cheating, classroom cheating behavior, the relationship between socioeconomic level (categorized as low, middle and high) and cheating, whether teachers could foresee cheating behavior and the potential link between IQ, grades and cheating. The researchers defined cheating as “the deviation score between students’ true and changed test scores on the Shaycoft Plane Geometry Test” (p. 160). The findings supported the study’s hypothesis: that students “considered by school and by total sample (.01), cheated significantly” with students who cheated from all schools in the sample (p. 162). The researchers found that the relationship between socioeconomic level and cheating was positive (.14) with the most cheating occurring
among those categorized as belonging to lower socioeconomic levels. Leveque and Walker (1970) also discovered that “64% of a low socioeconomic group and 30% of high socioeconomic group cheated” (p. 162). The results also showed a relationship between IQ and cheating for all schools involved, but only a slight difference between teacher ratings and cheating. Further, “in an adjunct analysis of the data on teacher ratings it was found that semester grades and teacher ratings for honesty correlated significantly ($r = .43$)” (Leveque & Walker, 1970, p. 162).

Students’ prior academic achievements or course grades could have also impacted cheating. Research suggested that students with higher course grades from the start of their educations were less likely to cheat as opposed to those with lower course grades at the start of their education (Cizek, 2003). In contrast to the relationship between grades and prior achievement, the relationship between age and grade level presented more complex factors to decipher since age and grade level regularly changed (Cizek, 2003). Socioeconomic status, general achievement and family structure also impacted student maturity in relation to age level.

Ercegovac and Richarson (2004) explained that student anxieties towards failure and parents’ expectations for good grades were pivotal reasons for cheating among high school students. Arhin (2009) added:

Ninety-three percent agreed that dishonest behaviors were exhibited in a scenario that described a student who looks at previously hidden notes (while in the bathroom) to find answers during an examination as well as a scenario that described a student who writes notes on her arm and refers to those notes during an examination. Ninety-percent of students sampled perceived a scenario that described a student writing mnemonics and abbreviations on her hand before an examination as a memory prompt as dishonest. (p.19)
School administrators may have represented the “missing link.” Some faculty members overlooked academic dishonesty because it was ignored or misunderstood at the administrative level. More communication between deans, administrators, and faculty could have best addressed these issues (Brown, Weible, & Olmosk, 2010). The lack of communications stemmed, in part, from deans and administrators not having full awareness of the academic dishonesty in their respective schools. Deans also did not believe students engaged in this conduct at high frequencies (Brown et al., 2010). Instead of increasing communication between deans and faculty, administrators felt that including ethics classes in the required curriculum would address the issue (Brown et al., 2010).

Walker (1998) claimed that students placed the blame of academic cheating on academic staff. According to these students, the staff lacked proper communication when identifying whether or not an incident constituted plagiarism. Walker (1998) detailed rates and types of plagiarism as follows:

- 54% of students admitted to plagiarizing from a text;
- 72% of students admitted to allowing their coursework to be copied;
- 66% admitted to paraphrasing without acknowledgement;
- 64% admitted to copying another student's work. (p. 92)

**Internet Plagiarism.** Anxiety levels as a function of student plagiarism rose simultaneous to the increased utilization of the Internet for research and writing purposes. Bacha et al. (2012) pointed to ample evidence which suggested that cheating (seen as early as elementary school all the way into workforce) caused by the Internet had increased in the previous decades. Causes for this increase, the researchers asserted, involved the widespread availability and user-friendliness of the Internet coupled with the ease of cutting and pasting as a
way to transfer across documents large quantities of complex qualitative and quantitative
information. “They noted that technological advancements also marked a major reason that
Internet cheating increased, particularly through the purchasing of essays online and erroneous
referencing practices” (p. 366). An exploratory study was conducted on 3,986 high school
students that investigated the understandings of student cheating and plagiarism including
Internet plagiarism. According to Bacha et al. (2012), results showed “no great differences on
test taking, writing and plagiarism” (p. 378). The results also indicated a possible correlation
between students who cheat and their cultural characteristics. Finally, the study showed
“students did not receive high rates of plagiarism, but the need for a common understanding of
academics ethics between students and teachers” were apparent (p. 378). Cheating was seen not
only in elementary schools, but in middle schools, high schools, universities and later into
working careers.

According to a study conducted by Scanlon (2004), 20% of students who belonged to an
institution admitted to Internet plagiarism (Eastman, Iyer, & Reisenwitz, 2008). While cheating
behavior among students had been a long-standing issue, Ma, Wan and Lu (2008) discussed a
new paradigm as they investigated the phenomenon of digital cheating and plagiarism in schools.
In their article, the researchers discussed how students developed an indifferent attitude towards
online cheating. They emphasized the importance of teachers addressing the issue of online
cheating as well as developing effective measures to eliminate incidences of digital plagiarism.
Researchers recommended the implementation of both an online and offline social community to
assist students in their understanding of plagiarism. Additionally, they discussed the importance
of utilizing anti-plagiarism software, enforcing punishment procedures for violations as well as
facilitating an environment that fosters ethical Internet behavior (Ma et al., 2008).
According to Arhin (2009), the use of technology became an easy source for academic dishonesty. Students had access to a myriad of wireless messaging hardwares and softwares including smartphones, iPods and the Internet. “Students can text each other answers to an examination with relative ease using cell phones” (p. 17). In addition, Arhin (2009) asserted that students utilized the Internet to search for applicable material, then cut and pasted paragraphs without quotation marks despite referring to the sources in their reference list.

Jones (2011) enlisted 48 students enrolled in an online business communication course. The study emphasized 10 different instructional strategies on academic integrity, avoidance of cheating and Internet plagiarism. Jones (2011) declared that role modeling academic dishonesty, digital citizenship, cheating and Internet plagiarism could reduce those behaviors and “carry over to the workplace” (p. 149).

**Personal /Situational Factors.** According to Davis et al. (2009), “by the time students reach high school, academic dishonesty is a favorite activity for a disappointingly large number of students” (p. 92). When considering the different attributes of cheating, the researchers added, one must have considered variables influencing the students’ identity including gender, age, previous grades/achievement and grade level. Academics have given gender the most attention among these variables, offering substantive research illuminating conclusions about variations in the propensity to cheat between young males and females (Cizek, 2003).

Cizek (2003) stated that in regards to cheating behavior, the data depicted no major gender difference among young children. Following this initial study, Coady & Sawyer (1986) found no variance between boys and girls in grades two through three, and six through eight. However, the gender gap became more pronounced at the high school level such that males cheated more than females (Cizek, 2003). This illustrated the contrasting viewpoints and results
of the various researchers when it came to gender and cheating at the high school level. Cizek (2003) asserted that young females cheated in high school more than young males. In addition, young females more often confessed to cheating, especially because they considered it a way to help others.

Cheating by young males seemed to continue into their college education as well. Henning, Ram, Malpas, Shulruf, Kelly, & Hawken (2013) suggested:

that male students are more tolerant towards unacceptable behavior, as noted during group work activities, than female students and this may be related to difference in sensitivity towards context…several other explanations for gender differences have also been posed in the literature, including motivational differences (male students are more extrinsic compared to the intrinsic nature of female students)...female students may be more risk-averse…and male students are more easily affected by social image compared to the independent nature of female students. (p. 1215)

Additionally, “at the high school level, researchers found a somewhat greater incidence of cheating on the part of boys” (Cizek, 2003, p. 10). The evidence collected regarding the difference between girls and boys in elementary years showed that boys moved “ahead of girls in the later high school years and are consistently found to engage in cheating more than girls during college and beyond” (Cizek, 2003, p. 10). Athanasou and Olasehinde (2002) investigated the degree “of academic cheating and any gender differences in self-reports” (p. 1). These researchers found significant amounts of high school students who cheated regardless of gender. The difference between these male and female students was slight; “unfortunately this affects many aspects of teaching, learning, and assessment and can disadvantage honest students” (p. 14). Their data showed “no statistical significant difference in the average proportions reported
for males and females ($t(34) = -0.58, ns$)” (p. 7). These findings reinforced Athanasou and Olasehinde’s (2002) hypothesis that only a slight discrepancy differentiated males and females in relation to cheating (21% of females, 26% of males).

Johnson & Gormly (1972) recruited 113 elementary school students in fifth grade as part of a focus group that measured cheating behavior in relation to personality and situational variables. The data confirmed the researchers’ hypothesis by showing a positive relationship between achievement motivation and letter grades. In this study, the “females were more influenced by variables pertaining to present self-evaluations than males. Low achievement motivation and a belief in external control were predictive of academic cheating among girls but not boys” (Johnson & Gormly, 1972, p. 324). Additionally, according to Newstead, Franklyn-Stokes, & Armstead (1996), “Davis et al. (1992), Baird (1980), Calabrese and Cochran (1990), conducted a survey that investigated 6,000 students and found no differences between the sexes” (Newstead et al., p. 230, 1996).

Newstead et al. (1996) described how “Hanies et al. (1996) and Houston (1983) found no differences between the sexes. Jacobson, Berger, and Millham (1970)” found a different result in their study of gender at the university level whereby “females cheated significantly more often than males” (p. 230). Motivation marked the primary cause of this difference in which female university students were more inclined to be intrinsically motivated than male students, which may have explained the positive correlation between gender differences and moral reasoning. According to Newstead et al. (1996), when a student studied because of desire and gratification, they were intrinsically motivated and unlikely to cheat. “Gender differences might also be related to differences in moral reasoning, though evidence that females have a better developed sense of moral responsibility is controversial” (p. 230).
Feldman & Feldman (1967) enlisted 81 seventh graders (45 males students and 36 female students) and 73 twelfth graders (40 male students and 33 female students) as part of a focus group investigating “differential change in the incidence of cheating by males vs. females during high school years” (p. 957). The data was analyzed using multiple contingency analyses with results showing that “although the incidence of cheating among twelfth graders surpassed that of seventh graders (42.5% vs. 28.4%), the difference is not statistically significant ($\chi^2$ 2.64, .20 > $p > 10$)” (p. 958). Assessing the variable of gender revealed that the increase in cheating by grade-level was most prevalent among male students. “While only 22.2% of seventh grade males cheated, 50% of twelfth grade males cheated” (p. 958). The data confirmed the researchers’ hypothesis by demonstrating how “males in high school show an increased propensity to engage in cheating”, and that the increased pressure on earning good grades also effected students’ moral character traits (Feldman & Feldman, 1967, p. 958).

Schmelkin et al. (2008) reported that a diverse set of variables may cause academic cheating. With regard to demographic characteristics, some of the analyzed variables included gender, achievement, age, personality and psychological constructs related to personality, morality and attitudes toward cheating. Other important variables included environmental/situational factors including class size, proctoring concerns and opportunities to cheat. “Lastly, reasons for academic cheating could also be influenced by grades, competition, time commitment and the task’s level of difficulty” (p. 588).

Davis et al. (2009) identified competitive classroom environment, chances of success, moral climate of the community, pressure for good grades, and lack of comprehending the connection between morality and academic misconduct as situational factors that could contribute to academic cheating. As a result of competitive classroom environments, some
students engaged in unethical acts in order to obtain good grades (Baha et al., 2012). Murdock and Anderman (2006) argued that cheating was more common in environments oriented towards competition and good grades. Some educators continued to fault students for cheating despite evidence underscoring the significance of classroom environment as a factor. Nevertheless, Tas and Tekkaya (2010) argued that student dishonesty could be minimized if the learning environment, including the classroom’s goal structures, aligned with the purpose of achievement.

Researchers have studied academic cheating through self-report measures. Anderson and Midgley (2004) recruited a group of fifth grade students to participate in a longitudinal study investigating incidences of cheating through self-report by survey. The students were surveyed about their cheating behavior at the start and middle of their eighth grade year, then again at the conclusion of their ninth grade year. Researchers found that self-reported cheating did not change in the year prior to students’ high school transition, but that it significantly increased post-transition during the ninth grade year (Anderson & Midgley, 2004).

At an urban middle school in a southeastern state, Anderman, Griesinger, and Westerfield (1998) recruited 285 students as part of a focus group investigating the relationship between motivational variables and self-reported cheating behaviors and beliefs. The researchers hypothesized “that cheating and beliefs in the acceptability of cheating would be more likely when students perceived an emphasis on performance and extrinsic incentives rather than on mastery and improvement” (p. 84). The findings showed the “incentive value of the reward” was more significant to them than the “academic task itself”, and that cheating was acceptable or a standard (p. 89). Logistic regression was utilized as the main analytic technique that showed “Students who report cheating tend to worry about school, perceive their school as being performance focused, perceive their classrooms as being extrinsically oriented, engage in self-
handicapping behaviors, and not report using deep-level strategies often in science” (p. 88). The researchers concluded that cheating was “related negatively to the use of deep-level strategies and positively to the use of self-handicapping strategies” (Anderman et al., 1998, p. 89).

Theories of Academic Dishonesty

Kohlberg’s Moral Development Theory. As mentioned in Chapter One, the main conceptual framework for this research was Kohlberg’s (1958) cognitive-moral development theory. Kohlberg (1958) grouped moral development into six stages across three major levels: pre-conventional level: (Stages 1 and 2); conventional level: (Stages 3 and 4); and post-conventional level (Stages 5 and 6).

The first moral level, labeled the pre-conventional level, was described as the level of children under 9, some adolescents, and many adolescent and adult criminal offenders (Kohlberg, 1984). The second moral level, labeled the conventional level, was the level “of most adolescents and adults in our society and in other societies” (p. 172). The third moral level, the post-conventional level, was “reached by a minority of adults, and is usually reached only after the age of 20” (p. 172).

Level 1 consisted of two stages: Stage 1 (Heteronomous Morality) and Stage 2 (Individualism, Instrumentalist Purpose, and Exchange). In Stage 1, the individual avoided breaking rules enforced through punishment, and avoided physically damaging persons and property (Kohlberg, 1984). In Stage 2, the individual followed rules “only when it is to someone’s immediate interest; acting to meet one’s own interests and needs and letting others do the same” (p. 172). Level 2 contained Stage 3 (Mutual Interpersonal Expectations, Relationships, and Interpersonal Conformity) and Stage 4 (Social System and Conscience). In Stage 3, the individual pursued “being good,” having beneficent intentions and showing concern
for others. Additionally, “keeping mutual relationships, such as trust, loyalty, respect, and gratitude” and believing in the Golden Rule becomes essential to doing things for the right reason (p.173). In Stage 4, fulfilling agreed upon tangible duties was imperative towards upholding social norms. Kohlberg (1984) added, “laws are to be upheld except in extreme cases where they conflict with other fixed social duties” (p. 174). The last two stages were Stage 5 (Social Contract or Utility and Individual Rights) and Stage 6 (Universal Ethical Principles). Stage 5 encompassed “a sense of obligation to law because of one’s social contract to make and abide by laws for the welfare of all and for the protection of all people’s rights” (p. 174). Stage 6, the final level, was “the belief a rational person in as the validity of universal moral principles, and a sense of personal commitment to them” (p. 176). Kohlberg, as well as Duska and Whelan (1975), concluded that moral judgment was the most influential factor in moral behavior. In addition, “moral judgment and the decision-making field has turned away from an exclusive emphasis on more deliberative decision models and has begun to include emotion as a substantial component” (Anderman & Murdock, 2007, p. 51).

Emotion could have a significant impact on decision making. First, existing mood marked a central component to responses towards unconnected decision tasks (Schwartz, 2000). Second, the expectations of emotions including disappointment and regret may have influenced decision-making. Third, recollection of emotions could lead to future decisions. Mood fluctuated during the process of cognitive development. According to Schwartz and Clore (1996), “a large body of literature shows that positive moods tend to lead to top-down decision making. Decision makers tend to rely on current knowledge in these cases, making more sweeping generalizations rather than focusing on details” (p. 151). In addition, because emotion was considered to be a source of information, and was “conceived as a global state of the brain
and mind,” it was problematic to distinguish preexisting feelings from feelings about an expected course of accomplishment (p. 151). With that in mind, one expected a hindrance “of the normal emotional decision check” (p. 151). Judgment and action came into play in a precise stage of moral judgment, which connected to moral decisions and moral development (Kohlberg, 1984).

Cheating behavior related to moral decisions. On cheating, Kohlberg (1984) argued that “the critical issue is whether to follow the norm when the conventional expectations of the adult and the group about not cheating are to be upheld” (p. 69). Kohlberg further stated:

While the conventional child thinks “cheating is bad” and cares about supporting the authority’s expectations, he or she has no real reason not to cheat if tempted, if the authorities don’t care and if others are doing it. In contrast, a principled (Stage 5 or 6) subject defines the issues as one involving maintaining an implicit contract with the adult and reflects that the general inequality or taking advantage implied by cheating is still true regardless of the ambiguity of social expectations in the situation. (p. 69)

When making judgments of moral development, it was critical to understand the difference between right and wrong, respect the rights of others, contemplate fairness and recognize different moral values in different cultures (Morris, Clark, & Potter, 2012). Kohlberg also stated, “moral development is growth and, like all growth, takes place according to a predetermined sequence. To expect someone to grow into high moral maturity overnight would be like expecting someone to walk before he crawls” (Duska & Whelan, 1975, p. 48). In short, even morals evolved in a natural growth pattern.

Duska and Whelan (1975) studied the process of moral development by concentrating their research “on people’s patterns of reason about moral decisions rather than on people’s behavior” (p. 3). Both Piaget and Kohlberg developed models mapping human moral
development. In so doing, they developed theories articulating the “stages an individual goes through in achieving moral maturity” (p. 3). Duska and Whelan (1975) agreed that individuals developed moral maturity over time for specific reasons. “There is a role for education to play in the moral and ethical development of its students because, without a well-rounded, balanced, educated citizenry having high standards, ethics, and morals, a nation cannot hope to maintain or advance its position in the world” (Kohlberg, 1984, p. 69). In terms of reducing student cheating, Davis et al. (2009) proposed two primary methods to deter student cheating and establish a culture of integrity in school: first, “moral development, primarily of students and teachers”; and second, “the institutionalization of integrity in education organizations” (p. 133).

Kohlberg (1984) outlined three approaches to morality. The first approach was “descriptive empirical inquiry, historic or scientific, such as is done by anthropologists, historians, psychologists, and sociologists. Here the goal is to describe or explain the phenomena of morality, or to work out a theory of human nature which bears on ethical questions” (p. 276). The second kind of approach involved normative ethical thinking. This sort of thinking was what “Socrates was doing in the Crito or that anyone does who asks what is right, good, or obligatory. This may take the form of asserting a normative judgment, like the utilitarian principle” (p. 276). The third approach entailed analytical, logical, critical or metaethical thinking. This type of thinking differentiated between what was good and what was right. This type of thinking also analyzed logic as well as epistemological or semantical questions that examined the ability to identify the core meaning of what was morally right or good. These inquiries asked, “how can ethical and value judgment be established or justified?” (Kohlberg, 1984, p. 276).
William Kibler, Mississippi State University’s Vice-President for Student Affairs, has advocated for the prevention of student academic misconduct (Davis et al., 2009). Kibler supported theories of cognitive moral development and connected ethical reasoning developments to effectively resolving moral dilemmas (Davis et al., 2009). An example of this was depicted in Cheating in School, where Davis et al. (2009) stated:

The experience of a student being caught for cheating can be used as a moment to work on moral development. However, this moment should not be left to chance, and it should not be assumed that learning from experience will occur through normal maturation; schools and colleges have a reusability to create intentional experiences of the students to develop ethical reasoning skills and moral judgment. (p. 134)

Moral beliefs, moral obligations or moral norms may have interrelated to behaviors of academic cheating in addition to students developing skills in moral judgment and ethical reasoning. Moral thoughts were most prominent when a student’s self-interest and the concentration of other students were at odds with each other (Harding, Carpenter, Finelli, & Passow, 2007). Having moral rules was reflected by moral norms. Lastly, moral obligation was the execution of the particular behavior of the student. Further, students who displayed unethical behavior in high school often showed the same type of behavior in college with advancing cheating behavior in the workplace (Harding et al., 2007). According to Davy, Kindcaid, Smith, and Trawick (2007):

The obvious concern is that these unethical behaviors will spill over into the workplace. This concern is justified given Ethical Research Center findings that one third of workers report regularly observing ethical misconduct in the workplace (Thompson, 2000). This is not too surprising in that prior research has shown that those who have cheated in the
past are more likely to cheat again (Davis & Ludvigson, 1995; Nonis & Swift, 1998) and that there is a link between cheating in college and subsequent dishonest behavior in the workplace (Crown & Spiller, 1998; Sims, 1998 as cited in Davy et al., 2007, p. 284).

Students engaged in academic dishonesty, which may begin in the elementary years, could show this type of unethical behavior as working professionals (Eastman et al., 2008). Three distinct studies conducted by Kidwell, Wozniak, and Laurel (2003); Chapman, Davis, Toy, and Wright (2004); and Nonis and Swift (1998) found that 63% to 75% of students reported cheating. Nonis and Swift went further, stating that students who cheated during college were more likely to cheat in the professional world when compared to students who did not cheat during college (Eastman et al., 2008).

If academic dishonesty was addressed as early as the elementary years and expectations for “acceptable behavior” or “ethical behavior” were set, cheating could diminish throughout a child’s educational journey and into their professional careers (Eastman et al., 2008). Though cheating may have been a “complex, psychological, social, and situational phenomenon” (p. 7), expectations of ethical behavior were not to be ignored. Rather, Eastman et al. (2008) argued that this behavior required attention in order to set students on the right track of classroom behavior. Eastman et al. (2008) added that when professors fully comprehend and addressed the basis of committing academic dishonesty, ethical behavior could then appear in the classrooms.

Eastman et al. (2008) posited that students who acted unethically in universities demonstrated the following characteristics: “male, undergraduates, non-business students, members of Greek social organizations, and those who had low self-esteem” (p. 9). These students also strived for high grades regardless of the deviant behaviors projected. Additionally, they lacked motivation and engaged in unsatisfactory work-study habits (Eastman et al., 2008).
These students portrayed unethical behavior such as blaming other students for their behavior; claiming the material they studied was too straining or had too strict of a time constraint; and accused the instructor of inadequate execution of material (Eastman et al., 2008). Eastman et al. (2008) also stated “those students who felt they had stronger reasons for committing unethical academic behaviors are more likely to commit academic dishonesty than those who felt they had weaker reasons for unethical academic behaviors” (p. 13).

According to McCabe (1999), students who engaged in unethical behaviors and cheated in school justified their behavior by blaming their peers. Eastman et al. (2008) agreed that “academic dishonesty is positively related to students’ attitudes towards unethical managers’ business behaviors. This suggests that the impact of academic dishonesty extends beyond that of the classroom” (p. 9).

Several factors have shaped understandings of academic dishonesty in society and in the academy. One involved distinguishing unique aspects of cheating and plagiarism even though both comprised academic dishonesty as a broader term. Another factor entailed an awareness that some students defined the difference between ethical and unethical in relation to academically dishonest behaviors. Universities maintained the responsibility to not only curtail and discipline cheating, but also to educate students in understanding the ethical consequences for their actions (McCabe, 2005, as cited in Eastman et al., 2008, p.12). Utilization of technology marked yet another factor. According to Eastman et al. (2008), “students who felt they had stronger reasons for committing unethical academic behaviors are more likely to commit academic dishonesty than those who felt they had weaker reasons for unethical academic behaviors” (p. 12). The eight types of academic dishonesty students considered serious included:
using crib notes on a test; copying from another student during a test; copying from another student during a test without his/her knowledge; helping someone else to cheat on a test; copying material and turning it in as your own work; fabricating or falsifying a bibliography; turning in work done by someone else; and copying a few sentences of material from a published source without footnoting it. (p. 12)

Justifications for academically dishonest behavior abounded among students. Eastman et al. (2008) found substantial evidence pointing to a relationship between “students who feel they have stronger reasons for unethical academic behaviors…are more academically dishonest in the areas of cheating, seeking outside help, plagiarism, and E-cheating than those students with weaker reasons for unethical academic behaviors” (p. 12). The results of this study implied that administrators and faculty influenced the prevalence of academic dishonesty. Both needed to address the reasons students used to permit unethical behavior and academically dishonest actions.

Bernardi et al. (2004) recruited 222 students from three different universities to research the association between attitudes on cognitive moral development and cheating. The findings showed that these students did cheat in high school, college or both. Additionally, the researchers established associations between students’ ratings of active considerations during the three cheating scenarios and their estimates of where cheating took place. The data showed 66.4% of students admitted cheating took place in high school, universities or both. The data also underscored a substantial “association among students’ attitudes on cheating, academic integrity, and academic honesty/dishonesty” (p. 406). Further, the study presented a correlation between a student’s higher moral reasoning and lower occurrence of cheating (Bernardi et al., 2004).
Gigerenzer and Hug (1992) described Social Contract Theory as encompassing a broader view of individual moral reasoning in relation to academic cheating versus other theories such as Pragmatic Reasoning Schema Theory and Availability Theory. Social Contract Theory, they explained, emphasizes that a rule understood through a contract on its own is solely semantic, leaving out key pragmatic variables. These researchers repeatedly found that character education had no influence on cheating and general moral character. Kohlberg (1984) depicted perspectives on higher stages of moral reasoning in a variety of ways. First, he argued:

that the higher stages are more philosophically adequate ways of resolving moral conflicts and represent cognitive advances over the lower stage. Secondly, he has attempted to show that the higher stage provides clearer guides to action. He has attempted to substantiate this second claim by examining the relationships between principled moral thought and action. (p. 214)

Bloodgood, Turnely, & Mudrack (2008) examined the impact of religiosity and intelligence on cheating. Their study concentrated on “whether ethics instruction helps to promote ethical behavior” in a sample of 200 upper level, undergraduate students (p. 565). The data showed that students engaged in classroom ethics instruction had less of a likelihood to cheat than students not engaged in classroom ethics instruction. Participating in religious services also motivated students to avoid cheating. In addition, students “who were highly intelligent displayed significantly less cheating if they were also highly religious” (p. 557). This religiosity may have made these students more cognizant of “the belief that cheating is wrong and has broad negative consequences” (Bloodgood et al., 2008, p. 565).

**Goal Oriented Theory (Mastery-Oriented vs. Performance Goals).** Goal orientation theory became a critical perspective in the areas of achievement motivation and academic
motivation in the last twenty years (Kaplan & Maehr, 2007). Goal orientation theory was and is a significant theoretical viewpoint on students’ motivation in institutes. “This theory provided a framework for extensive research on motivational orientations that contributes on students’ adaptive and maladaptive patterns of engagement” (p. 141). Environmental characteristics also represented an important element when nurturing motivational orientations. University professors have utilized the framework of environmental change in schools to enhance adaptive engagement (Kaplan & Maehr, 2007).

In a Washington state middle class school district, Evans and Craig (1990) recruited 1,763 students and 107 teachers of feeder middle schools and their parent senior high schools to explore the differences between students and teachers regarding critical attributes, causal attributes and efficacious prevention strategies. The key results of this research emphasized both “convergent and divergent ideas about cheating from students and teachers” where groups of both teachers and students “were sensitive to the incidence of cheating” (p. 49). However, when it came to the awareness about cheating types, teachers were more informed though students were more motivated than “teachers were to attribute cheating to characteristics of teachers, classrooms, and student themselves” (p. 49). Finally, most unexpected were the findings among middle school students and high school students in reference to their comprehension of cheating. Contrary to the researchers’ hypothesis that the focus group (older students) would show a better understanding of cheating, none of the age groups displayed substantial differences.

Initially, goal orientation theory was demarcated as “situated orientations for action in an achievement task” (Kaplan & Maehr, 2007, p. 142). This theory did not look at what people tried to accomplish. Rather, it focused on the why and how fueling their motivation and interlinking those tendencies with achievement behavior (Kaplan & Maehr, 2007). Moreover,
“these orientations were conceived of as encompassing the experience of the person in the situation, guiding interpretation of events and producing patterns of cognition, emotion and behavior” (Elliott & Dweck, 2005 as cited in Kaplan & Maehr, 2007, p. 142).

Kaplan and Maehr (2007) asserted that goal orientation theory was categorized primarily between two types of goals: performance and mastery. When a student developed competence, he/she focused on mastery goals. When an individual focused on performance goals, he/she preferred “learning, understanding, developing skills, and mastering information” with focus on “positive outcomes such as self-efficacy, persistence, preference for challenge, self-regulated learning and positive affect and well-being” (Kaplan & Maehr, 2007, p. 143).

Kaplan and Maehr, (2007) stated:

though mastery goals orientation focuses on the purpose of developing competence, performance goals orientation demonstrates competence. Performance-oriented students focus on managing the impression that others have of their ability…performance goals orientation was found to be associated with use of surface rather than deep learning strategies and with negative affect in events involving challenge or difficulty. (p.143)

Additionally, performance goal emphasized competitive rewards, peer comparison and attitudes that justify cheating. Goal orientation theory was connected with classroom goal structures and aligned with academic and social goals. According to Anderman et al. (2010), classroom goal structures were not only viewed through the broader context of goal orientation theory, but also obtained sufficient consideration in relation to cheating and the prediction of cheating. Kaplan and Maehr (2006) stated that achievement goal theory stressed the importance of student learning through a motivated behavior lens (as cited in Shin & Dickinson, 2010). McCollum and Kajs (2007) further explained the relation between goal orientation and the
outcome of students’ behaviors in accordance with the two frameworks. The dichotomy between the two frameworks differentiated between a student wanting to attain an “A” grade because he or she wanted to feel superior to his or her classmates, and the importance placed in mastering content. According to Murdock and Anderman (2006):

Goal orientation theory is a social-cognitive theory of achievement motivation. Goal theory originated early in the 20th century but became a particularly important theoretical framework in the study of academic motivation after 1985. Whereas other motivational theories (e.g., attribution theory) examine students’ beliefs about their successes and failures, goal orientation theory examines the reasons why students engage in their academic work. Although goal orientation theory is predominantly studied in the domain of education, it also has been used in studies in the domains of sports psychology, health psychology, and social psychology. (p. 1)

The first framework was called mastery goal or mastery-oriented goal. Mastery goal students grasped the task at hand, focused on strengthening abilities and contextualized their current achievement level with prior achievement levels (Kaplan & Maehr, 2007 as cited in Shin & Dickson, 2010). According to Tas and Tekkaya (2010), mastery goal structures were associated with effort and a desire to do the work necessary for learning. The researchers observed how students who focused on mastery-oriented goals tended to be motivated to learn, have positive educational outcomes and utilize effective cognitive processing strategies. Further, these students demonstrated a desire to master content and show effort, improvement and self-comparison when cultivating innovative skills. Mastery goals negatively predicted cheating behaviors (Tas & Tekkaya, 2010).
The second framework was called *performance goal-oriented* or *ego-oriented* students who pursued extrinsic or performance goals. According to Murdock and Anderman (2006), cheating increased among such students. Therefore, a *performance goal* structure focused on extrinsic goals and positively correlated with cheating. *Performance goal-oriented* students more often emphasized grades, competition and one’s capability in relation to peers while blaming teachers, rather than self-reflection, for setbacks (Tas & Tekkaya, 2010). Beyond the two major goal orientation frameworks, investigators found that *extrinsic goal* orientation correlated to a maladaptive attitude toward achievement, i.e. assigning to the task a lower value, reporting higher achievement anxiety, admitting to greater frequencies of cheating and using self-handicapping strategies (Murdock & Anderman, 2006).

Anderman and Midgley (2004) collected data from 586 eighth grade students and 507 ninth-grade students. The longitudinal study focused on cheating behaviors from middle school to high school and measured “self-reported cheating in mathematics, perceptions of the goal structure in mathematics classrooms (mastery and performance), and grade point average (GPA)” (p. 505). The study also suggested that high school students surpassed middle school students in cheating, and that male students surpassed female students in cheating. This difference in cheating by gender was supported by the data at the high school level but not the elementary level. Anderman and Midgley (2004) found:

During the eighth grade, changes in self-reported cheating were unrelated to changes in perceptions of a mastery goal structure; however, across the high school transition, cheating increased for students who moved from a high mastery to a low mastery math classroom, whereas cheating decreased for students who moved from a low mastery to a high mastery classroom. (p. 513)
Davis and Ludvigson (1995) collected data from 2,153 undergraduates to understand “the frequency of cheating, reasons for cheating, and influence of penalties on cheating” (p. 119). Nearly 30% of students admitted they cheated to increase their grades while some 15% said they cheated due to an aversion to studying. The results showed that “although cheating in college is a major problem that needs attention, there is an equally pressing need to discourage cheaters, especially repeat offenders, in high school” (p. 120).

According to Davey et al. (2007):

Those who are motivated to obtain valued outcomes or to avoid negative outcomes (external motivation) will see the potential for gain by engaging in unethical behaviors. At the same time, those motivated by a desire to learn or to engage in an activity (intrinsic motivation) are not helped in achieving these desires by engaging in unethical behaviors such as cheating. Although intrinsic motivation has been found to contribute positively to learning, there is evidence that extrinsic motivation impairs learning, resulting in poorer performance (Baker 2004, p. 190), and increasing the need to cheat. (p. 284)

**Factors Impacting Academic Dishonesty**

Four factors impacting cheaters included motivation, social norms, attitudes towards cheating and awareness of institutional policies related to cheating. Cheating behavior of middle school students related positively with performance goals and negatively with mastery goals at personal, classroom and school-wide levels (Anderman et al., 1998; Anderman and Midgley, 1997 as cited in Jordon, 2001).

Stephens and Gehlbach (2007) studied two California high schools, one a high-achieving school and the other an average-achieving school, with a sample of 337 sophomores and juniors
as part of a focus group that “measured students’ personal goals and their perceptions of the classroom goal structures” (p. 118). Analysis of the data included “a multivariate analysis of variance (MANOVA) design, with motivational goal profile and school as the tow between-subjects factor” (p. 124). As previous studies demonstrated, their findings showed personal mastery goals as unrelated or weakly associated with cheating, and perceived classroom performance goals positively associated with cheating. Additionally, Stephens and Gehlbach (2007) agreed that performance in the classroom and personal mastery goals were difficult to predict when it came to “attitudinal, perceptual, and behavioral outcomes” including motivation and achievement (p. 127). Motivation, the first factor that impacts cheaters, was evaluated by looking at the reason for achievement. Students seeking to master or learn had a lesser incidence of cheating, whereas students with a desire to achieve academic excellence had a higher incidence of cheating (Jordan, 2001).

Perceived social norms, the second factor, shaped how a particular group believed, thought or acted. McCabe, Tevino and Butterfield (1999) claimed that these variables formed a cheat factor. Peer attitudes and behaviors, the third factor, also influenced cheating behaviors, with elements of social comparison expressed by students as justifications for their actions (McCabe et al., 1999). Additionally, student perception of peer norms, accurate or not, influenced attitudes towards cheating.

The fourth factor impacting cheating underscored the students’ knowledge of institutional policy, which showed some correlation with academic integrity (Jordan, 2001). About half of the students from Jordan’s (2001) study correctly identified plagiarism when shown examples. Students familiar with the school’s institutional policies of academic integrity demonstrated
lower incidences of dishonesty while students less familiar with the policies showed higher levels of academic dishonesty (Jordan, 2001).

Intrinsic and mastery motivation was evident in non-cheating behaviors. However, extrinsic motivation did not “appear to be uniform across all courses, and this variability is related to cheating” (Jordan, 2001, p. 244). According to Jordan (2001), the “knowledge of institutional policy was the best predictor of cheating rates, followed by mastery motivation and attitudes about cheating” (p. 244). Further, participants from a previous study indicated that students “who cheated had lower mastery motivation and higher extrinsic motivation in the courses in which they cheated than in courses in which they did not cheat” (p. 244).

Jordan (2001) stated:

cheating behavior was related to perceptions of the behavior of peers and to attitudes about cheating. Both factors were significant predictors of cheating rates. Cheaters believed that more students engaged in cheating behaviors than did noncheaters. Cheaters also justified cheating behavior to a greater extent than did noncheaters. In addition, the more the participants cheated, the higher their estimate of cheating on campus. (p. 243)

Cheating behaviors also affected student attitudes and peer norms for comprehending and possibly manipulating the behavior (Jordan, 2001). For example, “low mastery motivation in a course increases a student’s risk for cheating in that course and increases the cheater’s tendency to cheat repeatedly. High extrinsic motivation may also increase student vulnerability to temptations to cheat” (p. 243).

Students concentrated on “grades and performance, heightened competition among classmates, loss of involvement in decision-making and impersonal relationships with teachers”
showed maladaptive motivational patterns predictive of cheating (Anderman et al., 1998, p. 98). According to Murdock, Hale, and Weber (2001), cheating may have been rationalized as the need to proliferate academic success. Achievement motivation variables justified the dissimilarity in cheating behavior. Both cheating and effort were thus considered their own diverse behavioral entities.

Murdock et al. (2001) examined the relationship between self-reported cheating amongst 495 middle school students as indicators of social and academic motivation. Researchers hypothesized that individual student factors such as self-efficacy and goal orientations may have predicted incidences of cheating (Murdock et al., 2001). They analyzed a variety of potential factors including the structure of participation; the commitment and experience of teachers; respect towards teachers; and a sense of school belonging. The results indicated no gender differences between seventh and eighth graders, but seventh graders more often admitted to cheating than eighth graders. Logistic regression models were utilized in determining the individual-classroom and school level predictors of students cheating. Through regression analysis, the researchers also investigated “relations between cheating and the predictor variables that were consistent with the t test” (p. 105). Additionally, according to Murdock et al. (2001):

Correlation coefficients among predictor variables revealed moderate to strong relations between classroom mastery goal structures and each of the four social motivational variables: teacher commitment \((r = .70, p < .001)\), participation structure \((r = .38, p < .001)\), teacher respect \((r = .44, p < .001)\), and school belonging \((r = .27, p < .001)\). (p. 105)

After logistic regression analyses, researchers found that while academic motivation
contributed to cheating behavior, the relationship variable was increasingly significant (Murdock et al., 2001).

In general, when positive relationships were built, the implementation of goals and standards were evident. Students who had healthy relationships with teachers or professors not only exhibited a foundation of mutual trust, respect and caring amongst one another, but a connection which may have engendered adherence to the schools’ values or morals regarding cheating (Murdock et al., 2001). When cheating was evident in the classroom, Murdock et al. (2001) asserted it may have derailed or obstructed the process of monitoring and adapting instruction. Therefore, it was crucial to identify classroom factors as well as evaluate the relationship between cheating and teachers that influenced or contributed to students’ dishonesty (Murdock et al., 2001).

Cheating and academic motivation were interrelated. The stress to perform in school could have contributed to a student’s decision to cheat. During a study conducted by Calabrese and Cochran (1990), high school students, regardless of gender, admitted to fearing failure and wanting to please parents with good grades as two other reasons for cheating.

According to Murdock et al. (2001), the probability of student cheating related to motivational goal orientation may have been a noteworthy predictor. Goal orientation theory, Murdock et al. (2001) posited, differentiated between students categorized as mastery (task) focused and performance focused. Students considered mastery oriented committed to academic learning, showing effort and willpower of performance which demonstrated intrinsic goals. According to Murdock et al. (2001), classroom mastery goals interlinked with teacher abilities and commitment.
Conversely, students with less skill sought gratitude for their accomplishments. “Although cheating seems antithetical to mastery goals, a focus on performance could augment cheating since it is a plausible strategy for both rewards, recognition and favorable self-presentation of ability” (Murdock et al., 2001, p. 42). Newstead et al. (1996) revealed in a study that 20% of undergraduates admitted that getting good grades marked their motivation to cheat. Additionally, “logistic regression analyses used to predict cheating versus not cheating revealed that classroom extrinsic and school performance goals were unique predictors of cheating once personal extrinsic goals, school worry, self-handicapping, and deep level strategy use were controlled” (Murdock et al., 2001, p. 109).

Variables related to cheating extended beyond the pressure to attain good grades. Murdock et al. (2011) found that levels of cheating and extrinsic orientations toward school work shared an important relationship. Some students did not feel they had to “work hard” or learn to obtain good grades. Social motivation also marked an important element of cheating (Murdock et al., 2001). According to Murdock et al. (2001), an individual who utilized “dishonest means” obtained a desired outcome. Students who cheated confirmed an insufficient bond with their surroundings or the “lack of support or lack of meaningful relationships with others in an environment” (p. 109). Murdock et al. (2001) extended the argument:

having lower perceptions of one’s academic self-efficacy, holding personal extrinsic goals, and perceiving the class as less focused on mastery or task goals were all associated with increased likelihood of cheating, though classroom task goals were not uniquely predictive of cheating behavior. (p. 109)

Bruggeman (1996) recruited 221 high school students as part of a focus group exploring similarities and differences among students who attended religious (parochial) and private
(secular) schools. The sample included 90 students from religious high schools, and 131 students from private high schools. The research utilized Rest’s Defining Issues Test (DIT) to assess the students’ moral development. The study showed students who attended “religious high schools do not appear to yield a higher level of cognitive morality” (p. 340). Additionally, the data did not show significant differences between the parochial and secular schools. Both focus groups showed “high levels of cheating, lying and high incidences of dishonest behavior” (p. 343). According to the data, Bruggeman (1996) concluded:

neither of these groups differed significantly from the normative data on high school students (Rest, 1979); religious students, \( t(326) = -0.352, p = .68 \), secular students, \( t(358) = 0.924, p = .36 \); total sample, \( t(417) = 0.334, p = .68 \). (p. 342)

Cheating may have also increased with the student grade level, an important trend for educators to track in their classrooms and on campuses. According to Murdock et al. (2001), teacher-led positive social climates accentuated mutual trust, respect and caring with an emphasis on classroom academic goal structures that could restrain cheating in schools. Establishing and encouraging teacher-student relationships by focusing on mastery also contributed to less cheating in the classroom (Murdock et al., 2001).

Leondari and Gialamas (2002) investigated the relationship between implicit theories of intelligence, goal orientation, perceived comprehension and success in school among 451 elementary students. According to this study, academic competence aligned with classroom achievement through the conceptualization, attribution, regulation, and determination of self. When referencing students’ accomplishments and methods of learning, cognitive and motivational factors persuaded learning while hampering theories of intelligence and academic goal orientation that were implicit (Leondari & Gialamas, 2002).
Implicit theories of intelligence were defined as the “principles about the fundamental nature of intelligence; specifically, whether intelligence is a fixed entity that cannot be changed (an entity theory) or a malleable quality that can be increased through one’s efforts (an incremental theory)” (Leondari & Gialamas, 2002, p. 279). These theories generated an outline for dispensing information, building representations of events and making implications. In academic environments, the influence of cognition and behaviors of an individual related to the “entity vs. incremental conception of intelligence” (p. 279). As such, implicit theories of intelligence connected with “effort and preference of challenge” (p. 279). Students who displayed incremental views of intelligence were more inclined to work through problematic tasks with the determination of comprehending the task and advancing their knowledge. On the contrary, students who exhibited an entity view tended to concentrate on their accomplishments. These individuals may have often circumvented perplexing tasks that could easily lead to poor performance and negative evaluations (Leondari & Gialamas, 2002, p. 279).

Achievement goals were the second motivational aspect correlated with an individuals’ achievement beliefs. Weiner (1990) noted that goal orientation theory connected with dissimilar elements of achievement research (Leondari & Gialamas, 2002). Further, achievement goals were described as “an integrated pattern of beliefs, attributions, and affect that produces the intentions of behavior . . . represented by different ways of approaching, engaging in, and responding to achievement-type activities” (p. 279). The achievement goals most considered included “the goal to develop and improve ability (referred to in this study as a task goal orientation), and the goal to demonstrate and prove ability (referred to in this study as a performance-approach goal orientation)” (p. 279). Not only were these achievement goals
theorized as approaches to motivational propensities, but were defined as avoidance tendencies (Leondari & Gialamas, 2002). Moreover, Leondari and Gialamas (2002) stated:

the goal of avoiding negative judgments from others or avoiding looking stupid may be dominant. However, the goal to avoid the demonstration of lack of ability has not played a major role in studies using a goal theory framework (Middleton & Midgley, 1997). More recently, researchers have started to turn their attention to this goal which is conceptualized as striving to avoid incompetence (Elliot & Harackiewicz, 1996, p. 461).

Leondari and Gialmas (2002) asserted that positive achievement connected with task goal orientation while negative consequences connected with performance goals that led to actions characterized by helplessness and lack of motivation. Dweck and Leggett (1988) claimed that perceived competence appeared to influence the construction of motivation with regard to implicit theories and achievement goals. Students who displayed buoyancy in their skill to prosper at a task would be identified as individuals portraying performance-approach goal orientation (Leondari & Gialamas, 2002). They accepted the challenge of attempting the task and persisted in an effort to successfully finish it (p. 279). Conversely, a student who “avoids tasks” alleged to be perplexing demonstrated declined performance, showing “negative affect and low persistence when they encounter difficulties” (Leondari & Gialamas, 2002, p. 279).

Moreover, younger elementary school-aged students preferred performance goals over task goals. Academic motivation and achievement declined among these students (Leondari & Gialamas, 2002). This decline could have been explained by a negative shift in motivational orientation coupled with lowered academic performance for children in their early adolescent years (Eccles & Midgley, 1989). This disengagement from school among high school students
was linked to the elementary-to-high-school transition among students experiencing secondary schools as academically frustrating and interpersonally unsupportive (Eccles & Midgley, 1989; Roeser, Midgley, & Urdan, 1996).

Elementary school-aged students tended to place less importance on intelligence than high school students, underscoring an incremental view of intelligence. This contrast, claimed Leondari and Gialamas (2002), could be explained by the developmental changes high school students underwent whereby children aged into new social perceptions of intelligence as a bedrock of stability. Incremental beliefs and task orientation have shown a positive correlation between each other. Goal orientations in task, performance-approach, and perceived competence also demonstrated substantial positive associations (Leondari & Gialamas, 2002). In their study, Leondari and Gialamas (2002) found “gender was a positive predictor of academic achievement and school level a negative one. Girls (\(MD = 8.16, SD = 1.38\)) outperformed boys (\(MD = 7.68, SD = 1.50\)) and elementary school students (\(MD = 8.59, SD = 1.29\)) outperformed high school students (\(MD = 7.32, SD = 1.34\)). Incremental beliefs were positively correlated with task and performance-approach goal orientations only” (Leondari & Gialamas, 2002, p. 279). In conclusion, students who exhibited less competence academically were identified as individuals who portrayed a performance-avoidance orientation.

Two factors played a major role in school achievement: achievement goals and perceived competence. Perceived competence impacted the relationship between achievement goals and actual achievement. In most previous studies, “task goals were positively correlated with academic achievement” (Leondari & Gialamas, 2002, p. 279). The presence of effort, an indispensable personality characteristic for some academic traits, was articulated by the
description of Typical Intellectual Engagement (TIP; Pass & Abshire, 2005). TIP was defined as the:

desire to engage and understand the world, interest in a wide variety of things, preference for completely understanding a complex topic, and a need to know (Goff & Ackerman, 1992). Typical Intellectual Engagement (TIP) correlates positively with crystallized intelligence (Goff & Ackerman, 1992), so it is likely that effort is correlated with this form of intelligence. Moreover, this relationship with crystallized intelligence suggests that an individual’s effort influences academic development. (p. 16)

Investment Theory (Catell, 1943; 1978) underscored two types of intelligence: fluid and crystallized. According to Pass and Abshire (2005), fluid intelligence was “the general ability to discriminate, comprehend, and reason. Students applying critical thinking skills to address situations or problems unfamiliar to them, would be using this type of intelligence” (p. 16). By contrast, crystallized intelligence marked an implicit understanding connected “with a particular interest or discipline (e.g., marketing, accounting, finance)” (p.16). The researchers stated that as crystallized intelligence progressed, utilization of fluid intelligence continued to “facilitate development of more crystallized knowledge, thus building on the body of knowledge held by a student” (Pass & Abshire, 2005, p. 16).

**Promoting Academic Integrity and Moral Education.** Kohlberg (1984) noted the main goal for a teacher, constructed “on the universal principle of justice underlining respect for all people,” was to interpret morality into a functional social environment where students understood the meaning of the "hidden curriculum" (p. 309). Hence, he provided teachers the necessary space to design their own "hidden curriculum" within individual school cultures (p. 309).
Specific measures may have deterred cheating. Diekhoff, LaBeff, Shinohara and Yasukawa (1999) conducted a study in Japan that examined how local students’ guilt, social stigma and fear of punishment restrained students from cheating. The same study conducted in the United States showed that both groups of students viewed social stigma as the least active deterrent to cheating (Diekhoff et al., 1999). Alshculer and Blimling (1995) discovered that students who cheated recognized that it was morally wrong, a finding that compelled the researchers to examine academic values, academic integrity and campus culture more so than student justifications for cheating.

Alschuler and Blimling (1995) articulated five elements that may have contributed to academic integrity and deterred cheating. The first involved having continuous and vocal support from the principal. Students learned the significance of honesty in speeches. The second entailed implementing an academic integrity code that was collaborative and inclusive of all stakeholders. Third, “faculty members, acting in unison, can help to change the norms that support the conspiracy of silence and the disregard that nurtures dishonesty” (p. 125). Fourth, an institutional force was necessary for faculty to access support systems through procedural details. Last, a change in campus culture could not move forward without student involvement. With regard to academic honesty, students could participate by forming academic integrity codes, spreading to peers knowledge about academic honesty, proctoring exams and seizing opportunities to serve on disciplinary boards that evaluated matters related to academic honesty (Alschuler & Blimling, 1995).

Programs that supported learning through the lens of moral values, ethics, and citizenship could bolster the ethical foundation of educational institutions. For example, implementing an
an effective character program may have educated students towards a more ethical character.

Lickona (1996) defined character education as:

> the deliberate effort by schools, families, and communities to help young people understand, care about, and act upon core ethical values” [1]. While one can certainly make a case for other models of moral education, advocates of character education believe the breadth and directness of their approach offer the most promising response to the social-moral problems that beset modern societies. (p. 93)

According to Lickona (1996), three elements comprised the core of the character movement. First, a student had to exemplify good character in order to be “fully human.” The researcher described an example of “fully human” as an individual who possessed “strength of mind, heart and will--qualities such as good judgment, honesty, empathy, caring, persistence, self-discipline and moral courage--to be capable of work and love, two of the hallmarks of human maturity” (p. 94). The second element entailed building school environments that disseminated teaching and learning. When students were “civil and caring”, then communities could hold staff and students responsible for upholding the “the values [on] which good character is based” (Lickona, 1996, p. 94).

The third element critical to building character education amongst students was constructing a moral society. Lickona (1996) asserted that amoral societies “suffer severe social and moral problems” such as “breakdown of the family, physical and sexual abuse of children, mounting violence, increasing dishonesty, the deterioration of civility in everyday life, drug and alcohol abuse” (p. 94). Lickona (1996) listed ten troubling trends that illustrated the difficulties students had with morality:

1. Rising youth violence.
2. Increasing dishonesty (lying, cheating, and stealing).
3. Greater disrespect for parents, teachers, and other legitimate authority figures.
4. Increasing peer cruelty.
5. A rise in bigotry and hate crime.
6. The deterioration of language.
7. A decline in work ethic.
8. Increasing self-centeredness, accompanied by declining personal and civic responsibility.
9. A surge of self-destructive behaviors such as premature sexual activity, substance abuse and suicide.
10. Growing ethical illiteracy, including ignorance of moral knowledge as basic as the Golden Rule and the tendency to engage in behaviors injurious to self or others without thinking it wrong. (p. 94)

With respect to the above trends, Lickona (1996) added that the basic tenants of character education, codified into a formal program, could have deterred cheating in high schools. To develop the basis of good character, character education programs cultivated core ethical values. The first component of such programming used “good character” to derail academic cheating. “Good character” was defined as individuals who displayed ethical values such as “caring, honesty, fairness, responsibility and respect for self and others” (p. 95). These individuals were disinclined to cheat when compared to students who did not portray these characteristics. These values also held students accountable by “promoting the development and welfare of the individual person” (p. 95). The key goal for this character education program was to foster students who could rise above “religious and cultural differences” (Lickona, 1996, p. 95).
The second component of an effective character education program, according to Lickona (1996), was the character of the individual. Character encompassed “the cognitive, emotional and behavioral aspects of the moral life” (p. 5). Exhibiting good character meant showing empathy, compassion and “acting upon core ethical values.” The linchpin of the character educational system entailed assisting students towards “the good, value it, and act upon it” (Lickona, 1996, p. 95).

The third component of an effective character education program, Lickona (1996) continued, utilized a comprehensive approach, both intentional and proactive, that strengthened students in all stages of school life. A comprehensive approach consisted of all facets of education such as “the teacher's example, the discipline policy, the academic curriculum (including the drug, alcohol, and sex education curriculum), the instructional process, the assessment of learning, the management of the school environment, relationships with parents and so on--as opportunities for character development” (p. 95). The fourth component of an effective character education program had the school construct a caring, moral community. “Creating a moral community signifies that the school itself must embody good character” (p. 95). In order to create a moral environment, students encountered core values such as showing respect, carrying out responsibilities and displaying benevolence and fairness towards others. This, in return, could “foster both the desire to learn and the desire to be a good person” (Lickona, 1996, p. 95).

The fifth component of an effective character education program, according to Lickona (1996), developed character by providing students with opportunities for moral action. Moral action evolved in individuals who learned by doing. One who displayed moral action, for example, “has many opportunities to apply values such as responsibilities and fairness in
everyday interactions and discussion” (p. 96). Additionally, students had to be constructive learners and receive ample opportunities facing real-life challenges and belonging to a collaborative team that shared responsibilities (Lickona, 1996).

The sixth component of an effective character education program involved a “meaningful and challenging academic curriculum that expects all learners to succeed” (Lickona, 1996, p. 96). Character education and academic learning went hand in hand. Students who received praise from teachers performed at higher levels and achieved beyond their conceived limits. Such students required exposure to a varied curriculum providing content and pedagogy that was challenging yet accessible to accommodate for students with a varying range of skills, needs and interests. Other classroom strategies included collaborative learning, problem-solving skills, experiential projects and cross-curricular training (Lickona, 1996).

The seventh component of an effective character education program developed students’ intrinsic motivation. In order to nurture “good character,” one had to commit to cultivating moral judgment. Additionally, “moral judgment and the decision-making field has turned away from an exclusive emphasis on more deliberative decision models and has begun to include emotion as a substantial component” (Anderman & Murdock, 2007, p. 51). Intrinsic motivation related to intrinsic commitment to core values and accentuating effort, individual improvement and adaptive motivational behaviors like diligence, determination, asking for help and less maladaptive behaviors (Anderman, Cupp, & Lane, 2010). Lickona (1996) also argued that schools needed to omit dependence on “extrinsic rewards and punishments that distract students' attention from the real reasons to behave responsibly: the rights and needs of self and others” (p. 96).
The eighth component of an effective character education program required the school staff to “become a leaning and moral community in which all share responsibility for character education and attempt to adhere to the same core values that guide the education of students” (Lickona, 1996, p. 96). All personnel of the educational institution had to abide by the same character education values. Therefore, “adults must model the core values in their own behavior and take advantage of the other opportunities they have to influence the character of the students with whom they come into contact” (Lickona, 1996, p. 96).

Both students and adults, Lickona (1996) suggested, should share the same values. For example, adults and students should have both been treated as productive learners. It was important to integrate character education by providing adults the opportunities to participate in staff development and thereafter transfer practices into their work with students.

The ninth component of an effective character education program was requiring moral leadership, a quality displayed by those already in an administrative or pedagogical leadership position. These moral leaders focused on “effort and a character education committee with responsibility for long-range planning and programme implementation” (Lickona, 1996, p. 96). Moral leaders assisted rather than showcased their own skills and advanced the capacities of others (Lickona, 1996).

Lickona (1996) stated that the tenth component of an effective character education program was the development of a robust network of stakeholders, including community members and parents. “Constructing a collective ownership between parents and staff is crucial in building and planning and policy making. Schools must take proactive approaches by communicating with parents about the school’s goals and activities regarding character development and how families can help” (Lickona, 1996, p. 97). Homes and schools aligned
with shared core values helped guide principles shaping behavior and action. Core values helped differentiate right from wrong or how the school executed different strategies of character education (Lickona, 1996).

The last component of an effective character education program was an evaluative framework that assessed “the character of the school, the school staff, functioning as character educators and the extent to which students manifest good character” (Lickona, 1996, p. 97). Essential measures were important to take when assessing the character of the school, such as the magnitude to which the school depicted a more caring community. Important questions that tracked staff growth in character education included “to what extent have adult staff--teaching faculty, administrators, and support personnel--developed understandings of what they can do to foster character development? Personal commitment to doing so? Skills to carry it out?” (Lickona, 1996, p. 97).

Perez-Pena (2012) stated the prevalence of academic cheating was also seen at the most competitive schools in the nation. These students not only included “average students”, but also high achievers engaged in deviant behaviors and attitudes that exhibited and violated standards of academic integrity. “In surveys of high school students, the Josephson Institute of Ethics, the school advisers on ethics education, has found that about three-fifths admit to having cheated in the previous year, and about four-fifths say their own ethics are above average” (Perez-Pena, 2012, p. 2).

**Honor Codes.** To prevent a culture of cheating, institutions needed to lay a firm foundation that supported professional and academic integrity. Academic honor codes such as traditional and modified honor codes could be implemented to promote honesty. According to Roig and Marks (2006):
Traditional honor codes are characterized by a written pledge of academic honesty, a student–faculty judiciary structure for handling honor code violations, peer reporting of academically dishonest activities, and unproctored exams.

Modified honor codes generally consist of a written pledge and some form of judiciary structure for honor code violations. (p 164)

McCabe and Katz (2009) collected data of juniors and seniors from 22 public high schools that investigated occurrences of cheating on tests. According to the national sample report, 74% of students admitted to cheating on tests, while 59% of students admitted to dishonest behavior such as plagiarism. McCabe and Katz (2009) agreed that high school honor codes could curtail these dishonest behaviors.

Arhin (2009) insisted on the importance of faculty communication with students on defining academic dishonesty, and expectations in relation to that definition. Honor codes with accompanying sanctions, procedures and policies were important to enforce in order to curtail academic dishonesty as a method proven by research studies (McCabe & Trevino, 2002; Scanlan, 2006). Integral to honor codes was the understanding and acceptance of academic integrity policies. According to Arnold, Martin, Jinks, & Bigby (as cited in Arhin, 2009), student participation in the development and administration of honor codes was critical for success.

Honor codes represented essential rudiments to building trustworthiness amongst students and offered a template for nurturing integrity on campuses. These codes, which may have contributed to establishing academic integrity, were also presented openly by communicating their importance to students as the foremost institutional value system (McCabe & Trevino, 2002). Establishing joint committees comprised of students and teachers to establish
and/or amend existing honor codes made students vested in honor codes. William Bowers, a renowned sociologist, conducted a groundbreaking study in 1960 on cheating among college students. In his study, he collected data from over 5,000 students across different campuses. From this sample, 50% admitted to some form of academic dishonesty.

McCabe and Trevino (2002) argued that students required exposure to a culture of integrity. An honor code advanced academic integrity and “creates a culture that makes cheating socially unacceptable among most students” (McCabe & Trevino, 2002, p. 40). Innovative technologies may have contributed to an increase in cheating in American high schools (McCabe & Trevino, 2002). Though the Internet offered beneficial and credible reference sources, it may have also produced for students new problems concerning plagiarism. A survey administered to 4,500 high school students showed that Internet plagiarism increased as a result of excessive workloads assigned by teachers, including too much homework (McCabe & Trevino, 2002).

McCabe and Trevino (2002) further argued that educators needed to guide students’ moral development by creating a safe, honest atmosphere that facilitated thoughtful considerations about academic integrity. Faculty and students should have worked collaboratively in creating a “campus culture where trust is higher, cheating is lower, and students learn to behave more ethically. As stated above, honor codes, both traditional and modified, seem to be an effective approach” (p. 40). Establishing a culture of academic integrity meant that educational institutions committed to and promoted communication between all members of the community (McCabe & Trevino, 2002).

To effect tangible change, effective honor codes needed to incorporate the following provisions: (a) a written contract in which students pledged that their assignments would be completed honestly; (b) a judiciary made up of mostly students to judge and examine cases of
academic dishonesty; and (c) an article that placed a certain level of responsibility on students to testify against their peers and report any instances of cheating. Those students involved in the honor code process were more inclined to report others who cheated in order to preserve their institution’s integrity (McCabe, Trevino, & Butterfield, 2001).

Comprehending how each educational institution defined academic dishonesty may have confused students. Instructing students on a clear, unambiguous definition of academic dishonesty was meant to curtail academic dishonesty, particularly during examinations. According to Arhin (2009), “there are countless numbers of students in education that do not comprehend the “true” meaning of academic dishonesty. The question here is, what constitutes plagiarism, or structured instruction on paraphrasing, or proper citation?” (p. 20).

Arhin (2009) stated that if students understood the term plagiarism or its associated protocols, academic cheating could decrease. For instance, “students could be encouraged to submit drafts of working copies of their papers. Thereafter, faculty could provide feedback to these working drafts. The process of using working drafts when writing a paper could potentially eliminate the opportunity of cutting and pasting from the Internet or purchasing "‘original" papers from Internet sites” (p. 20). Arhin (2009) also stated that students must feel empowered, be held accountable for their actions, and be “an active participant in this process” (p. 20).

He also stated that faculty must utilize alternative techniques when administering exams. During examinations, for instance, faculty could administer dissimilar test types, move the students’ seats, change questions and attach the honor code to the front of the examination. Faculty could also encourage students away from electronic devices such as cell phones, MP3 players or calculators. Arhin (2009) noted that academically dishonest behavior lessened during
exams when existing policies were reliably enforced. Honor systems, rules against cheating and effectively administered integrity codes could also curtail academic dishonesty (Jordan, 2001).

Habitually reinforcing standards to all parts of the education system could decrease cheating. In terms of academic dishonesty, cheating may have resulted from students not reading the school’s policy, or students uncertain about rules on sharing or recycling work. Additionally, institutions may have needed more standards in terms of setting boundaries, using clear and reliable expectations for students. Further, administrations failed to enforce boundaries and gave teachers a clear process to follow seriously (Grimes, 2004).
Chapter 3. Methodology

This chapter describes the research design, sampling method, instrumentation, data collection method, data analysis and the study’s potential limitations and delimitations. This quantitative study applied Kohlberg’s (1981) theoretical model to examine the relationship between moral reasoning and the attitudes towards classroom cheating among high school students in a private Armenian school in Southern California. This study, which utilized three instruments, examined the relationship between moral reasoning and academic dishonesty moderated by goal orientation. This relationship was examined using moderated multiple regression.

Research Design

This quantitative, relational study explored the relationship between the moral reasoning levels of high school students at an Armenian private school in Southern California and attitudes toward academic dishonesty, and the extent to which, if at all, this relationship was moderated by goal orientation. After collecting the subjects’ demographic data, the study surveyed the participants’ attitudes about various proactive and reactive measures aimed at reducing or eliminating academic misconduct. After, three surveys were administered. The first survey, the Defining Issues Test Version 2 (DIT-2), evaluated the participants’ level of moral reasoning by examining their responses to three moral dilemmas. The second survey utilized McCabe's Academic Integrity Survey that evaluates cheating based on incidences and measuring student perceptions on a Likert-type scale describing various forms of cheating. The third survey was the Patterns of Adaptive Learning Survey (PALS) (Midgley et al., 1998), which assessed subjects’ personal goals and their perceptions of classroom and/or school goal structures/orientations. After submitting their parents’ consent forms and completing consent
documentation, each student received a packet which started with a page that collected basic demographic information before offering the three surveys in one of the following distinct orders: (1) DIT-2, AIS and PALS; (2) DIT-2, PALS and AIS; or (3) PALS, DIT-2, and AIS.

**Research Setting**

Surveys were distributed to high school students at an Armenian private high school in Southern California. The school is a preschool through twelfth grade college-preparatory institution dedicated to Armenian cultural awareness and scholastic excellence in a friendly environment. The high school division has an average class size of about 25 students. Additionally, the average acceptance rate for seniors to attend university and four–year-colleges is 70%, with 98% of students considered “college-ready” by senior year. As a result of the nature of the topic, the sensitive questions asked, the varied sample size and the topic variation, surveys were administered in-person by an adult volunteer proctor, approved by the school administration, unaffiliated with the high school community.

**Population, Sampling Method, Sample and Response Rate**

**Population and Sample.** A purposive, total population, sampling approach was used to solicit all suitable volunteer subjects. The inclusion criteria accepted full-time students at the high school, grades 9 to 12. Of the 179 possible student participants in the high school, males represented a little under half the overall population at 89, and females represented a little over half the overall population at 90.

The study’s target population was Armenian-American private high school students in Southern California from families who immigrated to the United States over the last four generations. Among this sample, 15 students came from a mixed ethnic background that included Armenian, and one student did not have any known Armenian ancestry. Currently,
there are over one million Armenians that reside in the United States with a large concentration in Southern California. Van Lint (2009) characterized the Armenian identity’s origins as tracing back to a variety of sources and sub-cultures including Indo-European, Anatolian (with an admixture of Semitic elements), Urartean, Iranian (in various successive stages), Hellenistic, Syrian, and Greek Christian. Other distinguishing features included the Armenian language and the Armenian Church, thus forming an amalgam of cultural (and sub-cultural) identities consisting of numerous ingredients that were heavily stratified (van Lint, 2009).

The G*Power 3.1 software program (Faul et al., 2009) was utilized to determine the necessary sample size for a multiple regression model. The threshold sample size to reach a sufficient power (.80) was 68 respondents with two predictors based on a medium effect size \( (f^2 = .15) \) and an alpha level of \( \alpha = .05 \). Additionally, the main statistical analysis was multivariate regression.

**Human Subject Considerations.** In order to conduct the study, the researcher solicited and obtained permission from the Vice-Principal of the high school where data collection occurred. Following this, approval was sought from Pepperdine’s Graduate School of Institutional Review Board (GSP IRB). Prior to collecting data, the researcher attained approval from subjects and their families by distributing and collecting a signed and dated Parent-Guardian Informed Consent to Participate in Research Form, a Parent/Legal Guardian Consent Form and a Youth Assent Form (ages 14 to 17). Data for this study was compiled in agreement with all the rules and regulations of the GSP IRB. The researcher followed all ethical norms and standards in conducting the study as well as following all guidelines set by the IRB in the protection of human subjects in research. Only the researcher has access to the data, which will
be stored in a locked filing cabinet in the primary researcher’s home for three years. Thereafter it will be shredded.

Participants were current high school students at a private Armenian school in Southern California. Two announcements from the Vice-Principal were made over the school intercom system during morning announcements two days and one day before the survey. These announcements reminded students that they could volunteer to participate in this anonymous survey and had the chance to win one of three $50 Amazon gift cards through a raffle. An adult volunteer proctor, approved by school administration and unaffiliated with the high school community, distributed a letter titled Request Hand-Out which explained the reason for conducting the research and the interest of the researcher on the topic: the relationship between cognitive moral development and attitudes toward cheating of the school’s high school students. Prior to collecting data, the researcher obtained completed Parent-Guardian Informed Consent to Participate in Research Forms, and Parent/Legal Guardian Consent Forms from parents of all participants who agreed to be in the study. Students who agreed to participate returned the signed Youth Assent Forms (ages 14 to 17) on the day of the study.

The survey – which consisted of a demographic sheet, the Defining Issues Test-2 (DIT-2), McCabe’s Academic Integrity Survey (AIS), and Patterns of Adaptive Learning Survey (PALS) – was conducted the last week of August 2017. Permission slips were distributed on August 28, 2017, and the surveys were administered on August 30, 2017. On the day of the study, participants assembled in the school’s 287-seat auditorium, which has no audio or video surveillance equipment (microphones, cameras, etc.). An independent proctor unaffiliated with the high school community approved by the school administration first collected the parental consent and assent forms. For students who submitted a parental consent form or assent form on
the day of the study, the proctor confirmed the form belonged to the student by checking his/her school or state ID. If the school or state ID was unavailable, then the proctor asked the student for his/her first and last name. In the case of parental consent forms, the proctor used last names to match students with parental consent forms. If last names between parent and child differed in the case of parental consent forms, then the proctor verbally asked the student if the parent's name and signature on the form came from a legal guardian. If the student answered "yes", then the proctor proceeded with administering the survey. If the student answered "no", then the student was thanked and disqualified from participation due to lack of necessary documentation. If the student's school or state ID was unavailable in the case of assent forms, then the proctor verbally asked the student for his/her full name to confirm it matched the name written on the form. A match meant proceeding to administering the survey. If the names did not match, then the student were disqualified from participation due to lack of necessary documentation.

Next, the proctor explained out loud a description of the survey on behalf of the researcher, the need for honest responses, and the intended purposes of the study and the benefits and incentives for respondents. The survey administration process then commenced using the following method. The proctor provided each student with a bound packet consisting of consent information, the data collection instrumentation, a clipboard, and a pencil and/or pen. The first page showed the IRB Approved Consent to Participate Form followed by the demographic page and the three other survey instruments. If the student (ages 14 to 18) agreed to participate in the research, they signed the consent and tore off the first page of the packet which was passed forward to the proctor. After gathering the consent forms, the students completed the other surveys which were collected by the proctor at the end of the 45 minutes allotted for survey
completion (plus an additional 15 minutes for those needing additional time). Students completed the survey in the same auditorium simultaneously and sat wherever they preferred.

The letter asked the students to participate in this study because they were a high school student attending a private Armenian high school in Southern California and were between the ages of 14 and 18. If they agreed to be in the study, the students would be asked to complete the paper-and-pencil surveys which asked them to rate position statements about ethical dilemmas and asked for their opinion about academic dishonesty. To participate in the study, they completed the surveys in the auditorium. The letter also explained other pertinent elements such as confidentiality and how no individual identities were used in any reports or publications resulting from the study. The data for the study was coded with paper copies of all materials kept in locked files, both of which only the researcher can access. Individual results were not and will not be shared with any person or organization, and raw data was and will only be accessible to the researcher.

Students were informed that upon completion of the data collection and data entry, all hard copies (consent documents, survey instruments, etc.) would be destroyed. The remaining data, per protocol, was and will be maintained for three years after completion of the survey and thereafter be shredded. Students were informed that confidential information about them will be disclosed if required by law, and that members of the research team and Pepperdine University Protection Program (HSPP) may access the data. Participating students were informed that HSPP reviewed and monitored research studies to protect the rights and welfare of research subjects.

Participation in the research was voluntary. Participants were free to decline to be in this study or to withdraw from it at any point with no adverse consequence whatsoever. Those who participated in the study automatically qualified for a raffle with the opportunity to win one of
three $50 Amazon gift cards. The raffle winners were announced on speaker during morning announcements within a week of submitting the surveys and gift cards were distributed by the Vice-Principal in the Vice-Principal’s office. In the unlikely event that the minimum necessary sample size was not reached, middle school students may have been solicited by obtaining permission to collect data from the students and their legal guardians through the appropriate assent and consent forms. In addition, a “request for modification” would first be solicited from the IRB if this step became necessary. This measure was not necessary.

**Confidentiality.** The survey designed was implemented because of the sensitive nature of the subject matter. This type of design collected data about a convenience sample of participants from a given population. The primary interest was in generalizing to the population through inferences based on the sample. The confidential treatment of data collected from the survey allowed participants to respond with reasonable assurance that their involvement would not be utilized against them. The surveys collected data about the subjects’ moral reasoning, their attitudes about the problem of academic dishonesty and their goal orientation. The purpose of survey research was to generalize from a sample to a population so that inferences could be made about the population’s characteristic, attitudes or behaviors.

**Instrumentation: Defining Issues Test (DIT), Academic Integrity Survey & Patterns of Adaptive Learning Survey (PALS).** The first survey was the Defining Issues Test-2 (DIT-2) which evaluated participants’ level of moral reasoning by examining their responses to three moral dilemmas; one score was computed, with higher scores indicating a higher level of moral development. The second survey was McCabe's Academic Integrity Survey that determined cheating incidences, measuring students’ perceptions of cheating and its various forms using a Likert-type scale; a single score was computed, with higher scores indicating a greater number of
cheating incidents. The third survey was Patterns of Adaptive Learning Survey (PALS) 
(Midgley et al., 1998) and measured subjects’ personal goals and their perceptions of classroom 
and/or school goal structures/orientations. Although this scale consisted of three subscales, only 
the two Performance Goal subscales were used; a single mean score was computed and higher 
scores indicated a stronger adherence to a performance orientation.

**Self-Rated Academic Performance Measure.** For all survey instruments, language was 
used to ensure students reflected upon their behavior in all of their classes, not just one specific 
course. Instructions of all instruments in this study were modified to refer to "the courses in 
which I'm enrolled" instead of "this class" (or similar phrasings that would have limited 
instrument relevance to a single course). This was done to demonstrate that this study measured 
behaviors exhibited globally across all the student’s classes. The demographic information of 
participants included students between ages 14 and 18 from grades 9 through 12 at an Armenian 
private high school in Southern California. Students were not excluded based on previous 
academic performance and/or current grade point averages. Demographic information collected 
included gender, GPA, age, grade level, utilization of academic support, and ease of past 
academic performance using the Self-Rated Academic Performance Measure. Tables 2, 3 and 4 
illustrate the criteria and other information provided by these three surveys:
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Additional Information</th>
<th>Citation(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name and Purpose</strong></td>
<td>Defining Issues Test–2; Measurement of moral judgment</td>
<td>A Neo-Kohlbergian Approach. Rest, Narvaez, Thoma, &amp; Bebeau 1999, p. 313</td>
</tr>
<tr>
<td><strong>Development Process</strong></td>
<td>Expert panel created; Graduate seminar tested</td>
<td>DIT2: Devising and Testing a Revised Instrument of Moral Judgement. Rest, Narvaez, Thoma, &amp; Bebeau 1999, p. 647</td>
</tr>
<tr>
<td><strong>Number and Names of Scales</strong></td>
<td>Stage 23, Stage 4P, &amp; P; Personal Interest Schema, Maintaining Norms Schema, &amp; Postconventional Schema</td>
<td>DIT2. Rest, Narvaez, Thoma, &amp; Bebeau 1999, p. 647</td>
</tr>
<tr>
<td><strong>Number of Items</strong></td>
<td>Three scenarios; 12 questions about issues pertinent to scenario</td>
<td>DIT2. Rest, Narvaez, Thoma, &amp; Bebeau 1999, p. 647</td>
</tr>
<tr>
<td><strong>Response Format</strong></td>
<td>Type 1 – Type 6; Ranges from predominant in Personal Interest to Maintaining Norms to Postconventional</td>
<td>A Neo-Kohlbergian Approach. Rest, Narvaez, Thoma, &amp; Bebeau 1999, p. 313</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td>Cronbach's α and test-retest reliability; Both coefficients range from high .70s to low .80s</td>
<td>A Neo-Kohlbergian Approach. Rest, Narvaez, Thoma, &amp; Bebeau 1999, p. 311</td>
</tr>
<tr>
<td><strong>Validity</strong></td>
<td>Seven criteria to determine construct validity for moral judgment;</td>
<td>A Neo-Kohlbergian Approach. Rest, Narvaez, Thoma, &amp; Bebeau 1999, p. 310</td>
</tr>
<tr>
<td></td>
<td>Differentiation of various age/education groups, longitudinal gains, correlation with cognitive capacity, factor analysis</td>
<td></td>
</tr>
</tbody>
</table>

90
Table 3

*Psychometric Characteristics for McCabe’s Academic Integrity Survey*

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Additional Information</th>
<th>Citation(s)</th>
</tr>
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<tr>
<td>Names and Purpose</td>
<td>Academic Integrity Survey; Measurement of academic dishonesty</td>
<td>McCabe and Trevino 1993, <em>p</em>. 529</td>
</tr>
<tr>
<td>Development Process</td>
<td>Authors created and tested</td>
<td>McCabe and Trevino 1993, <em>p</em>. 529</td>
</tr>
<tr>
<td>Number and Name of Scale</td>
<td>One composite scale; Self-reported academic dishonesty</td>
<td>McCabe and Trevino 1993, <em>p</em>. 529</td>
</tr>
<tr>
<td>Number of Items</td>
<td>12 Items; Test cheating, homework collaboration, uncited research etc.</td>
<td>McCabe and Trevino 1993, <em>p</em>. 529</td>
</tr>
<tr>
<td>Response format and anchors</td>
<td>4-point Likert scale; 1 = Never to 4 = Many times</td>
<td>McCabe and Trevino 1993, <em>p</em>. 529</td>
</tr>
<tr>
<td>Scoring and Norms</td>
<td>Large sample size (n = 6,096); M = 15.29, SD = 4.21</td>
<td>McCabe and Trevino 1993, <em>p</em>. 529</td>
</tr>
<tr>
<td>Range of Scores</td>
<td>Range of 12 -48; Higher scores represent more frequent academic dishonesty</td>
<td>McCabe and Trevino 1993, <em>p</em>. 529</td>
</tr>
<tr>
<td>Reliability</td>
<td>Cronbach's α = .794</td>
<td>McCabe and Trevino 1993, <em>p</em>. 529</td>
</tr>
<tr>
<td>Validity</td>
<td>Author established validity; Widely accepted and used by universities worldwide</td>
<td>International Center for Academic Integrity website[^1^]</td>
</tr>
</tbody>
</table>

Table 4

Psychometric Characteristics for Patterns of Adaptive Learning Survey

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Additional Information</th>
<th>Citation(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and Purpose</td>
<td>Patterns of Adaptive Learning; Measures personal goals and perceptions of school</td>
<td>Midgley et al. 1998, p. 114</td>
</tr>
<tr>
<td>Developmental Process</td>
<td>Multiple studies, varied samples, longitudinal and single-point design</td>
<td>Midgley et al. 1998, p. 114</td>
</tr>
<tr>
<td>Number and Names of Scales</td>
<td>Three: Personal Performance-Approach, Personal Performance-Avoid, Personal Mastery (but only Performance subscales will be used together to create a single score)</td>
<td>Manual for the PALS; Midgley et al. 2000 p. 73</td>
</tr>
<tr>
<td>Items and Subscales</td>
<td>Six items each; Develop competence, demonstrate competence, avoid demonstrating incompetence</td>
<td>Manual for the PALS; Midgley et al. 2000 p. 7-10</td>
</tr>
<tr>
<td>Format and Anchors</td>
<td>5-point Likert Scale; 1 = <em>Not at all true</em> to 5 = <em>Very true</em></td>
<td>Midgley et al. 2000 p. 2</td>
</tr>
<tr>
<td>Scoring</td>
<td>Range of 1-5 per scale; Higher scores represent more orientation toward each scale</td>
<td>Midgley et al. 2000 p. 7-10</td>
</tr>
<tr>
<td>Reliability</td>
<td>Cronbach’s alpha: $\alpha &gt; .60$ for all samples</td>
<td>Midgley et al. 1998 p. 117</td>
</tr>
<tr>
<td>Validity</td>
<td>Multiple studies affirming convergent, construct and discriminant validity; Measured correlations between scales and cognition, behavior, and affect</td>
<td>Midgley et al. 1998 p. 119</td>
</tr>
</tbody>
</table>
Data Collection

Method. Surveys were distributed according to a schedule created by the researcher in consultation with the school’s principal. The three surveys took approximately 45 minutes to complete with an additional 15-minute grace period added at the end to accommodate students needing more time. The sequence of the three surveys students received were randomized such that participants from each grade level were equally likely to receive any of the survey instrument’s counterbalanced variations. Students were asked to first answer questions about demographic information before starting the survey.

Light refreshments were given at the end of the survey, and participating students had a chance to win one of three $50 Amazon gift card through a raffle. Additionally, the presentation script which explained these matters aloud included the need for honest responses, survey’s description, intended purposes of the study and the benefits and incentives for respondents. At the end of the 45-minute mark, all surveys were collected by the independent proctor followed by the serving of light refreshments. The three hard copy surveys were completed by paper and pencil, with the instruments counterbalanced by the researcher (and distributed randomly to participants) to mitigate sequence effects. This technique resulted in six distinct orders of instrumentation, with a demographic information form always coming first: DIT-2, AIS and PALS; DIT-2, PALS and AIS; or AIS, DIT-2, and PALS; AIS, PALS, and DIT-2; PALS, DIT-2, and AIS; and PALS, AIS, and DIT-2.

The three surveys determined if relationships existed between cheating incidences of high school students in a private Armenian school in Southern California and their moral reasoning levels and attitudes toward academic dishonesty as moderated by goal orientation. The study utilized descriptive analysis to disclose the incidences of cheating, attitudes toward academic
cheating and the moral development levels as moderated by goal orientation of full time high school students in an Armenian school. Thereafter, correlational data analysis was used to determine the extent to which, if at all, relationships existed between the variables used.

Proctoring took place in the auditorium because of its seating capacity which could accommodate all subjects taking the survey. The auditorium had no surveillance equipment (microphones, cameras, etc.) and allowed for students to sit wherever they felt comfortable in the space. The layout of the auditorium also made it easy for the proctor to distribute the surveys, provide pens and/or pencils, and collect both the signed consents and completed survey instruments at the end of the 45-minute session (with an additional 15-minute grace period at the end for students who need more time). Participants were entered into a raffle with the opportunity to win one of three $50 Amazon gift cards. Every page of their demographic sheet and survey was randomly assigned a number between 1 and 100. The raffle winner’s number was announced on speaker during morning announcements within a week of submitting the survey. The raffle winners collected their Amazon gift card from the Vice-Principal in the Vice-Principal’s office.

Analytic Techniques/Data Analysis. The independent variable was moral development, measured on an interval scale. The moderator was goal orientation, also measured on an interval scale. The dependent variable was attitudes toward academic dishonesty, measured on an interval scale as well. To test the moderating effect of goal orientation on the relationship of moral development and attitudes toward academic dishonesty, a moderated regression procedure was conducted. Hayes’ PROCESS (2013) macro was used to test for moderation.

Summary. This quantitative, correlational design study examined how moral reasoning levels of high school students at a private Armenian school in Southern California and attitudes
toward academic dishonesty as moderated by goal orientation relate to one another. The DIT-2, McCabe’s Academic Integrity survey and PALS measured students’ moral reasoning levels and attitudes toward academic dishonesty as moderated by goal orientation. The statistical analyses focused on the links between variables to reveal any statistically significant relationships. Confidence intervals indicated the accuracy and precision of the results.

The next chapter summarizes the main findings of this study, as well as findings connected to each research question.
Chapter 4. Data Analysis and Findings

The data analysis and results of the study are presented in this chapter in five sections: (a) restatement of the problem, (b) demographics of the population, (c) description of the findings, (d) data analysis of Research Question, and (e) a summary.

Summary Statistics

Data collection was accomplished by personally inviting high school students to participate in the study. A total of 70 of approximately 285 high school students that were contacted and invited chose to participate in this study.

Findings

Reliability. Prior to creating the mean composites (used in later procedures), the reliability of the measures was assessed. Per Nunnally and Bernstein (1994), a measure was typically considered modestly reliable if its Cronbach’s alpha was .70 or higher. Given this criterion, both measures demonstrated reliability (see Table 5). To determine that the scales used were reliable and consistent, Table 5 has the Cronbach’s alpha reliability coefficients for performance orientation and attitude towards academic dishonesty.

Table 5

*Cronbach’s Alpha for the Study Measures, Reliability for Performance Orientation and Attitude Towards Academic Dishonesty (N = 70)*

<table>
<thead>
<tr>
<th>Measures</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance orientation</td>
<td>.74</td>
</tr>
<tr>
<td>Attitude towards academic dishonesty</td>
<td>.97</td>
</tr>
</tbody>
</table>
**Normality.** Per Kline (2011), a variable was univariate normal if its skewness index (i.e., skewness statistic/standard error) was less than three and if its kurtosis index (i.e., kurtosis statistic/standard error) was less than 20. As shown in Table 6, the distribution of the moral reasoning level was non-normal. Thus, it was transformed using a natural log function (Tabachnick & Fidell, 2013). Since the skewness index of the transformed variable dropped to an acceptable 2.51, the transformed Post-Conventional variable was used in subsequent analyses. Table 6 has the skewness and kurtosis values to assess normality for the study variables performance orientation, attitude towards academic dishonesty, and moral reasoning level.

Table 6

*Skewness and Kurtosis Values for Performance Orientation, Attitude Towards Academic Dishonesty, and Moral Reasoning Level (N = 70)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Skewness Statistic</th>
<th>Skewness Index</th>
<th>Kurtosis Statistic</th>
<th>Kurtosis Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance orientation</td>
<td>-.15</td>
<td>-.54</td>
<td>-.03</td>
<td>-.05</td>
</tr>
<tr>
<td>Attitude towards academic dishonesty</td>
<td>-.67</td>
<td>-2.37</td>
<td>.34</td>
<td>.06</td>
</tr>
<tr>
<td>Moral reasoning level</td>
<td>1.39</td>
<td>4.86</td>
<td>2.99</td>
<td>5.27</td>
</tr>
</tbody>
</table>

*Note. SE for skewness statistic = .28. SE for kurtosis statistic = .57.*

**Descriptive Statistics**

**Description of the Sample.** As shown in Table 7, slightly more than half of the sample consisted of females (57.1%). Grade 10 students comprised the largest group of respondents (48.6%); the least represented group was that of the grade 12 (8.6%). Table 7 has the frequency counts for gender and grade level of the students in the study.
Table 7

*Frequencies Counts for Gender and Grade Level (N = 70)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>30</td>
<td>42.9</td>
</tr>
<tr>
<td>Female</td>
<td>40</td>
<td>57.1</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>11</td>
<td>15.7</td>
</tr>
<tr>
<td>10</td>
<td>34</td>
<td>48.6</td>
</tr>
<tr>
<td>11</td>
<td>19</td>
<td>27.1</td>
</tr>
<tr>
<td>12</td>
<td>6</td>
<td>8.6</td>
</tr>
</tbody>
</table>

**Summary Statistics of the Study Variables.** Students were between 14 and 18 years old; the mean age was 14.99 (SD = .86). GPA ranged from 3.00 to 4.96; the mean GPA was 3.99 (SD = .47). The sample was a representation of the population with a mean GPA of 3.50. The mean Performance Orientation score was 2.82 (SD = .67) out of the highest possible score of five. The mean Cheating score was 45.53 (SD = 18.29) out of the highest possible score of 78. Table 8 has the descriptive statistics for the students’ age, GPA, performance orientation, attitude towards academic dishonesty, and moral reasoning level.
Table 8

Descriptive Statistics for Age, GPA, Performance Orientation, Attitude Towards Academic Dishonesty, and Moral Reasoning Level (N = 70)

<table>
<thead>
<tr>
<th>Measures</th>
<th>Range</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>14.00 to 17.00</td>
<td>14.99</td>
<td>.86</td>
</tr>
<tr>
<td>GPA</td>
<td>3.00 to 4.96</td>
<td>3.99</td>
<td>.47</td>
</tr>
<tr>
<td>Performance orientation</td>
<td>1.22 to 4.22</td>
<td>2.82</td>
<td>.67</td>
</tr>
<tr>
<td>Attitude towards academic</td>
<td>.00 to 78.00</td>
<td>45.53</td>
<td>18.29</td>
</tr>
<tr>
<td>dishonesty</td>
<td>.00 to 53.33</td>
<td>11.19</td>
<td>10.33</td>
</tr>
</tbody>
</table>

Moral reasoning level

Testing the Moderating Effect of Performance Orientation on the Relationship between Moral Reasoning and Cheating Behavior

Checking the Regression Assumptions.

Multivariate normality. Multivariate normality was assessed via the normal probability plot yielded by the SPSS regression procedure. Per Norusis (1990), multivariate normality is met when the points are clustered towards the diagonal. As shown in the figures below, this assumption was fulfilled. Figure 1 assesses multivariate normality via the Q-Q plot yielded by the SPSS regression procedure.
To determine whether the assumptions of linearity and homoscedasticity were fulfilled, Figure 2 has the scatterplot of the studentized deleted residuals by the standardized predicted values. Specifically, this plots residuals versus fitted values (i.e., unsystematic vs. systematic variation).

Figure 1. Q-Q plot testing multivariate normality.

To determine whether the assumptions of linearity and homoscedasticity were fulfilled, Figure 2 has the scatterplot of the studentized deleted residuals by the standardized predicted values. Specifically, this plots residuals versus fitted values (i.e., unsystematic vs. systematic variation).
Figure 2. Cheating model scatterplot of residuals versus fitted values (i.e., unsystematic versus systematic variation).

**Linearity and homoscedasticity.** To determine whether the assumptions of linearity and homoscedasticity were fulfilled, the scatterplot of the studentized deleted residuals by the standardized predicted values was examined. Per Norusis (1990), the assumptions of linearity and homoscedasticity were met when the plot yielded a random scatter. Both assumptions were fulfilled.

**Multi-collinearity.** To ensure that the predictors were not highly correlated with each other, the tolerance values were requested. Per Norusis (1990), multi-collinearity was a problem when the tolerance values were less than .20. As shown in Table 5, tolerance values were all .99; thus, multi-collinearity was not deemed to be a problem.

**Procedure.** It was hypothesized that performance orientation would moderate the relationship between moral reasoning and cheating behavior. To test this hypothesis, hierarchical linear regression procedures were conducted using Hayes’ PROCESS SPSS 2.13 macro (2013). Hayes’ macro allows for a detailed analysis of the interaction between continuous variables via the Johnson-Neyman (JN) technique. In comparison to the “pick-a-point” approach espoused by
many statisticians (e.g., Aiken & West, 1991), the JN technique identified regions of significance for the moderator effect via a quadratic equation (see Hayes, 2013 for a complete description of the Johnson-Neyman floodlight analysis technique). The predictor and the moderator were entered in the first step. These variables were mean-centered to control for multi-collinearity (Judd, McClelland, & Ryan, 2009). The product of the predictor and the moderator (i.e., the interaction term) was entered in the second step.

**Results.** The findings in Table 9 revealed that performance orientation did not significantly moderate the relationship between moral reasoning and cheating behavior, $B = -.59$, $p = .837$. Therefore, the hypothesis was not supported. Note that only performance orientation significantly predicted cheating behavior, $B = -8.02$, $p = .015$; the higher the performance orientation scores, the lower the cheating behavior scores. Table 9 has the results of the linear regression model that predicted cheating behaviour from performance orientation, moral reasoning levels, and the interaction between performance orientation and moral reasoning levels.

**Table 9**

*Prediction of Cheating Behavior based on Selected Variables (N = 70)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance orientation</td>
<td>1.24</td>
<td>1.86</td>
<td>.08</td>
<td>.67</td>
<td>.99</td>
</tr>
<tr>
<td>Moral reasoning level</td>
<td>-0.59</td>
<td>2.87</td>
<td>-0.02</td>
<td>-0.21</td>
<td>.99</td>
</tr>
<tr>
<td>Orientation x post-conventional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. TOL = tolerance. Overall model $F(3, 66) = 2.15, p = .102, R^2 = .089.*

* $p < .05. ** p < .01. *** p < .001.
The findings of the study revealed that performance orientation did not significantly moderate the relationship between moral reasoning and cheating behavior, $B = -0.59, p = .837$. Therefore, the hypothesis was not supported. Performance orientation significantly predicted cheating behavior, $B = -8.02, p = 0.15$; higher performance orientation scores correlated to lower cheating behavior. Looking at the effect of the interaction between performance/goal orientation and post-conventional/moral reasoning, students did not have any meaningful difference in their cheating scores as a result. Since $B = -0.59$, the interaction between performance/goal orientation and post-conventional/moral reasoning had a small effect on cheating scores (barely half a point) and the effect was not significant, $p = .837$. The stated hypothesis was thus not supported. A small negative effect characterized the positive relationship between moral reasoning levels and students attitudes toward academic dishonesty whereby more moral reasoning led to higher cheating scores. Note that only performance orientation significantly predicted cheating behavior, $B = -8.02, p = .015$; higher performance orientation scores corresponded to lower cheating scores. (Since B represents the average change in cheating scores, students with higher performance orientation scored, on average, about eight points lower on cheating scale – a strong effect on the relationship with a statistically significant effect, $p = .015$.)

**Summary of Major Findings**

The major findings of this study included:

- Performance orientation was not significantly moderated by the relationship between moral reasoning and cheating behavior, $B = -.59, p = .837$.
- Performance orientation significantly predicted cheating behavior, $B = -8.02, p = .015$.
  - Higher performance orientation scores correlated to lower cheating behavior scores.
Additional Findings:

- Cheating environment was not correlated with cheating behavior.
- Cheating was not different as a function of gender despite a trend towards higher mean cheating scores for males.
- With a maximum possible score of 6, mastery orientations mean scored higher than performance orientation mean.
- Mastery orientation was not a significant predictor of cheating behavior.
- Cheating culture characteristics: (a) severity of penalties for cheating was determined by the high school; (b) faculty understood and supported campus policies concerning student cheating; (c) there was an average of student understanding around campus policies on student cheating.
- Cheating was not correlated to Grade Point Average (GPA).

Supplementary Findings

**Gender Differences.** The literature review revealed that cheating was not different as a function of gender despite a trend towards higher mean cheating scores for males. According to Cizek (2003), “at the high school level, researchers found a somewhat greater incidence of cheating on the part of boys” (p. 10). The evidence collected regarding the difference between girls and boys in elementary years showed that boys moved “ahead of girls in the later high school years and are consistently found to engage in cheating more than girls during college and beyond” (p. 10). Additionally, the findings showed males had higher cheating scores, $M = 48.03$ and $SD = 14.15$, compared to the females, $M = -43.65$, $SD = 20.84$, $t(68) = 0.99$, $P = .33$. Table 10 has the results of the $t$ test comparisons for cheating scores based on the students’ gender.
Table 10

Comparison of Cheating Scores for Male and Female Students.  *t* Tests for Independent Means *(N = 70)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>SE</th>
<th><em>t</em></th>
<th><em>p</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheating Behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>30</td>
<td>48.03</td>
<td>14.15</td>
<td>2.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>40</td>
<td>43.65</td>
<td>20.84</td>
<td>3.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Cheating Culture.** The cheating environment variable utilized the following items:

- Severity of penalties for cheating at a school.
- Average of student’s understanding of campus policies concerning student cheating.
- Faculty’s understanding of campus cheating policies.
- Faculty support of campus cheating policies.

After creating environment variable 1 through 4, the findings showed that the average cheating score suggested that most students did not belong to a strong environment (*M* = 3.63, *ST* = 0.63.) The highest score of 5 was the absence of cheating. With the highest possible mean score of 5, cheating did not appear evident. Table 11 has the descriptive statistics for the cheating environment variable.

Table 11

Descriptive Statistics for Cheating Environment *(N = 70)*

<table>
<thead>
<tr>
<th>Variable</th>
<th><em>M</em></th>
<th><em>SD</em></th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheating Environment</td>
<td>3.63</td>
<td>0.63</td>
<td>2.00</td>
<td>4.75</td>
</tr>
</tbody>
</table>
Cheating environment was not correlated with cheating behavior, \( r (70) = -0.12, p = 0.32 \).

There was no significant correlation. Table 12 has the Pearson correlations for cheating behavior with cheating environment, performance orientation, and mastery orientation.

**Table 12**

*Intercorrelations Among Cheating Behavior, Cheating Environment, Performance Orientation, and Mastery Orientation (\( N = 70 \))*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cheating Behavior</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Cheating Environment</td>
<td>-0.12</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Performance Orientation</td>
<td>-0.29*</td>
<td>-0.11</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>4. Mastery Orientation</td>
<td>-0.09</td>
<td>0.11</td>
<td>-0.11</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* \( p < 0.05 \), ** \( p < 0.01 \), *** \( p < 0.005 \), **** \( p < 0.001 \).

The results echoed Crittenden et al. (2009) who found that cheating culture existed when students accepted cheating behavior and believed cheating necessary for success or achieving goals. Though cheating at educational institutions was not considered a new phenomenon, Crittenden et al. (2009) pointed out that “cheating is perceived as giving a student a competitive edge and is easily justified by students” (p. 338). According to the data, the student subjects believed cheating helped achieve a goal, and recognized that everyone around them cheated in order to succeed. However, the students agreed that cheating behavior was not acceptable.

Additionally, the findings showed the following: (a) severe penalties to deter cheating existed in the high school, (b) there was an average of students’ understanding of campus policies concerning student cheating, (c) faculty had an understanding of campus policies concerning student cheating. Therefore, cheating culture somewhat existed at this institution.
Cheating was not significantly correlated to GPA, \( r(70) = -0.04, p = .77 \). Table 13 has the Pearson correlation for cheating behavior with GPA.

Table 13

*Correlation for Cheating Behavior with GPA (N = 70)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheating Behavior</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

* * * * * * * * * * * * *

Students were between 14 and 18 years old; the mean age was 14.99 (\( SD = .86 \)). GPA ranged from 3.00 to 4.96; the mean GPA was 3.99 (\( SD = .47 \)). The mean Performance Orientation score was 2.82 (\( SD = .67 \)) out of the highest possible score of 5. The mean Cheating score was 45.53 (\( SD = 18.29 \)) out of the highest possible score of 78. Grimes (2004) illustrated that struggling students had a higher likelihood of cheating to earn passing grades. Interestingly, students with above-average grades also cheated, particularly those focused on college admissions rather than mastery skills. Cheating may have begun in elementary school by students who disrupted or tested rules to win against one another in competitive games.

Mastery orientation mean, scored out of 6, was higher at \( M = 3.61, SD = 0.82 \) than Performance orientation mean; scored out of 5, \( M = 2.82, SD = -0.67 \). Table 14 has the descriptive statistics for performance orientation and mastery orientation.
Table 14

*Descriptive Statistics for Performance Orientation and Mastery Orientation (N=70)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Orientation</td>
<td>2.82</td>
<td>0.67</td>
<td>1.22</td>
<td>4.22</td>
</tr>
<tr>
<td>Goal Orientation</td>
<td>3.61</td>
<td>0.82</td>
<td>2.00</td>
<td>5.60</td>
</tr>
</tbody>
</table>

The results of the regression indicated the two predictors explained 8.9% of the variance, $R^2 = .089$, $F(3,66) = 2.15$, $p = .10$.

**Kohlberg Moral Development.** In their study of over 44,000 subjects, Rest, Thoma, and Edwards (1997) documented that the DIT items clustered around three general schemas: appeal to personal interests, maintaining social laws and norms, and appeal to moral ideals for resolving complex moral issues. Because of this, the authors suggested describing individuals in terms of these three schemas instead of a single stage of development. The means and standard deviations for the three schemas are shown in Table 15. For all three schemas, the possible range of scores was zero to sixty. As shown in Table 15, the current study sample scored highest in terms of Personal Interests and lowest in terms of Post-Conventional Thinking. Table 15 shows the students’ ratings of the Kohlberg moral development schemas sorted by highest mean.

Table 15

*Means and Standard Deviations for the Three Moral Schemas*

<table>
<thead>
<tr>
<th>Schema</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal interest</td>
<td>57.51</td>
<td>17.29</td>
</tr>
<tr>
<td>Maintaining norms</td>
<td>19.08</td>
<td>12.43</td>
</tr>
<tr>
<td>Post-conventional</td>
<td>11.19</td>
<td>10.33</td>
</tr>
</tbody>
</table>
Conclusions and Implications

This quantitative, relational study explored the relationship between the moral reasoning levels of Armenian private high school students in Southern California and their attitudes toward academic dishonesty, and the extent to which, if at all, this relationship is moderated by goal orientation. The study aimed to address gaps in the literature by using Kohlberg’s (1958) theory of moral development to examine how academic dishonesty, such as cheating, was associated with the moral development level of Armenian private high school students in Southern California, and the extent to which, if at all, this relationship was moderated by the degree of students’ performance orientation. No prior research was known to have been done with this specific cultural group in a high school setting. The results of the study and review of the literature recognized several areas that merit further investigation. Studying with greater depth the relationship between moral development and cheating behavior would offer value to researchers and high schools seeking to develop and implement more strategic plans to enhance academic integrity. The data indicated that personal factors such as gender, GPA, and cheating culture had a greater impact on cheating (McCabe et al., 2001).

The majority of the literature reviewed for this study examined cheating behavior, and the cheating culture in which students demonstrated their adherence towards or against academic integrity. The literature also looked at performance orientation and its effect on cheating. Further, the literature and data showed the consequences of cheating, and the importance of reinforcing polices in Armenian high schools in order to decrease academic dishonesty. This research focused on contextual factors affecting cheating such as campus climate, peer behavior, peer disapproval, and honor codes. Such factors had less impact on cheating behavior than personal factors such as age, gender, and GPA (McCabe et al., 2001). As student cheating in American
high schools increased, students admitted to cheating more than any other form of unethical behavior, such as dishonest conduct (Davis et al., 2009).
Discussion

The purpose of this study was to explore the relationship between moral reasoning levels of Armenian private high school students in Southern California and their attitudes toward academic dishonesty moderated by the degree of students’ performance orientation. By gathering, examining, and analyzing survey data, the researcher identified several distinctive relationships between moral reasoning levels, attitudes toward academic dishonesty, and goal orientation. The outcome of this study was viewed through a theoretical lens that took into account the main conceptual framework of Kohlberg’s (1958) cognitive moral development theory and goal orientation framework.

According to Leonardi & Gialamas (2002), goal orientation had an ancillary effect on achievement which interceded through alleged competence. A task goal orientation identified as mastering a skill correlated with “positive achievement beliefs that advances to adaptive educational outcomes” (Leonardi & Gialamas, 2002, pg. 141). On the contrary, performance goals were associated “with negative achievement beliefs that often lead to maladaptive behaviors including low task engagement, less persistence, and the occasional adoption of a helpless response” (Ames & Archer, 1988; Elliot & Dweck, 1988; Leonardi & Gialamas, 2002, p.141). According to Ames (1992), Dweck (1986), Maehr (1984), and Nicholls (1984), goal orientation theory emerged as not only a critical theoretical view, but also as an approach to assessing students’ motivation in school (Leonardi & Gialamas, 2002). This theory was not only responsible for a framework on motivational orientations, but contributes “to students’ adaptive and maladaptive patterns of engagement” (Kaplan & Maehr, 2007, p. 141). According to Amies (1992), these two main orientations were characterized as “mastery” and “performance” goals.
Mastery goals orientations helped students develop competence along with “focus on learning, understanding, developing skills, and mastering information” (Kaplan & Maehr, 2007, p. 142). These associations promoted outcomes “such as self-efficacy, persistence, preference for challenge, self-regulated learning, and positive affect and well-being” (Kaplan & Maehr, 2007, p. 142). Finally, by mastering skills, students were found to cope positively, show perseverance, and solve problems by showing “strategies and achievement on task (Bereby-Meyer & Kaplan, 2005), and positive social attitudes towards others” (Kaplan & Maehr, 2007, p.142).


Kohlberg modified and expanded upon Piaget’s work to form a theory that explained the development of moral reasoning (Hannah et al., 2005). Piaget described a two-stage process of moral development, and stated that he himself “believed that his moral judgment stages are structural in the sense that (1) they represented ‘structural wholes,’ that is, a constellation of traits indicative of global heteronomous or autonomous attitudes toward rules and (2) that they constituted a relatively irreversible sequence” (p. 83). Furthermore, Kohlberg’s theory of moral development detailed six stages across three different levels (Hannah et al., 2005). Kohlberg’s extension of Piaget’s theory proposed that moral development was a continual process that occurred throughout the lifespan (Hannah et al. 2005).

Kohlberg grouped six moral stages into three primary levels: pre-conventional level (Stages 1 and 2), conventional level (Stages 3 and 4), and post-conventional level (Stages 5 and 6) (Kohlberg, 1984). The first moral level, labeled the pre-conventional level, concerned children under age 9, some adolescents, and many adolescent and adult criminal offenders.
(Kohlberg, 1984). The second moral level, labeled the conventional level, was the level “of most adolescents and adults in our society and in other societies” (Kohlberg, 1984, p. 172). The third moral level, labeled the post-conventional level, was “reached by a minority of adults, and is usually reached only after the age of 20” (p. 172).

In addition to Kohlberg’s moral development, Erik Erickson’s was another contributor to this field. Erickson, a German-American known for his theory on psychological development of human beings, concentrated on and coined the term “identity crisis.” In relation to cheating, Erickson believed that both cheating and social anxiety related to moral development (Erikson, 1985). Allowing nurturing techniques was fundamental for developing moral development which contributed to a sense of self to group belonging (Erickson, 1985).

According to Erickson, signs of social anxiety positively correlated with academic cheating (Erikson, 1985). High school students, he said, focused on moral identities and social evaluation. Erickson (1985), stated that “growing and developing youths, faced with this physiological revolution within them, and with tangible adult tasks ahead of them are not primarily concerned with what they appear to be in the eyes of others as compared with what they feel they are, and with the questions of how to connect the roles and skills cultivated earlier with occupational prototypes of the day” (p. 261).

During this fifth stage, high school students also explored a sense of self and personal identity through an intense investigation of personal values, beliefs, and goals (Erikson, 1985). “The adolescent mind is essentially a mind or moratorium, a psychosocial stage between childhood and adulthood, and between the morality learned by the child, and the ethics to be developed by the adult” (Erikson, 1985, p. 263). In addition to building morality of the individual, accountability fostered integrity. According to Erickson (1985),
in order for a student to fit in a society or social group, they had to show independence, and be willing to look ahead in terms of career, relationship, families, etc. Conferring to the study, the rate of responses could have increased by an alternative suggestion that the participants were reluctant to “own up” to cheating or because of worrying that their peers would think less of them if they told the truth about their cheating. This explanation could be related to Eric Erickson who discusses social evaluation or social anxiety of stage five, identity versus role confusion. In conclusion, a secure attachment and building relationships between teachers, educational environment, and students could have also helped form resilience, integrity, and develop a child’s sense of self and identity. This relationship bond was vital in constructing the blocks of trust and integrity and fostered accountability between all stakeholders.

Additionally, in their study of over 44,000 subjects, Rest et al. (1997) documented that the DIT items clustered around three general schemas: appeal to personal interests, maintaining social laws and norms, and appeal to moral ideals for resolving complex moral issues. Because of this, the authors suggested describing individuals in terms of these three schemas instead of a single stage of development. For all three schemas, the possible range of scores was zero to sixty. A significant finding from the current study sample scored highest in terms of personal interests and lowest in terms of post-conventional thinking. Furthermore the data showed that the students’ ratings of the Kohlberg moral development schemas sorted by highest mean.

H1: It was hypothesized that there would be a positive relationship between high school students’ moral reasoning levels and their attitude on academic dishonesty. Further, it was predicted that this relationship was moderated such that students’ higher performance orientation would strengthen the relationship between moral reasoning and attitude toward academic dishonesty.
The findings revealed that performance orientation did not significantly moderate the relationship between moral reasoning and cheating behavior, $B=-.59, p = .837$. Therefore, the hypothesis was not supported. Performance orientation significantly predicted cheating behavior, $B = -8.02, p = .015$; higher performance orientation scores correlated to lower cheating behavior. Looking at the effect of the interaction between performance/goal orientation and post-conventional/moral reasoning, students did not have any meaningful difference in their cheating scores as a result. Since $B = -.59$, the interaction between performance/goal orientation and post-conventional/moral reasoning had a small effect on cheating scores (barely half a point) and the effect was not significant $p = .837$.

A small negative effect characterized the positive relationship between moral reasoning levels and students attitudes toward academic dishonesty whereby more moral reasoning led to higher cheating scores. Only performance orientation significantly predicted cheating behavior $B = -8.02, p = .015$; higher performance orientation scores corresponded to lower cheating scores. (Since $B$ represents the average change in cheating scores, students with higher performance orientation scored, on average, about eight points lower on cheating scale - a stronger effect on the relationship with a statistically significant effect, $p = .015$).

Additionally, there were alternative reasons why the hypothesis, which stated that performance orientation would moderate the relationship between moral reasoning and cheating, was not supported; yet, performance orientation significantly predicted academic cheating behaviors. This alternative reason could have been that high school students not only focused on performance, but were influenced by peer-pressure, social acceptance, and competitiveness which were all components to achievement goals. According to the Anderman & Danner (2008), achievement goals, such as performance goals, “act from an exploitation orientation are more
likely to be wary of others’ taking advantage of them” (Poortvliet, Janseen, Yperen, & Van de Vliert, 2007, p. 1444). Poortvliet et al. stated (2007):

although performance-driven individuals may be inclined to use shallow task strategies in performing tasks, when they obtain task-related information from others they make sure they use only good information. This is a form of adaptive behavior because people with performance goals tend to be wary of people who might want to deceive them, as their goal attainment is dependent on outperforming others. Students who are performance oriented are concerned about what others think of them and are continuously competitive and wanting outdo their peers. (p. 1444)

Goal Orientation theory has proven to be a very useful perspective for the study of academic cheating, and this will likely continue to be true. Its primary yield, thus far, has been to identify some individual and contextual motivational variables related to cheating (Anderman & Danner, 2008). Furthermore, the data collected showed that performance orientation predicted cheating behavior. Many individuals, regardless of the GPA, gender, environment, and competition, focused on contextual influences such as: parental/peer pressure for grades, social comparison in the classroom, and classroom goal structures (extrinsic goals). Grimes (2004) illustrated that struggling students had a higher likelihood of cheating to earn passing grades. Students with above-average grades also cheated, particularly those focused on college admissions rather than mastery skills. Additionally, “students who focus on their abilities, social comparisons, and extrinsic rewards report increased dishonesty (Anderman & Murdock, 2006, p. 129).

Anderman and Murdock (2006) stated:

Many of the individual and contextual factors that are related to cheating can be
subsumed under a motivational framework whereby students’ decisions to cheat or not cheat can be understood as coming from their answers to three motivational questions: “What is my goal?”, “Can I do this?”, and “What are the costs?” Framing dishonesty in this manner has implications not only for teaching practices, but also for theories of motivation. Students may respond to low self-efficacy or high needs for achievement by being dishonest, rather than simply by increasing or decreasing effort, changing their learning strategies, or self-handicapping. (p. 130)

**Policy Recommendations.** Kohlberg’s (1958) framework helped contextualize and comprehend the practical implications of this study’s findings. One significant finding showed that moral-reasoning levels, based on the DIT2 study sample, scored highest in terms of personal interests and lowest in terms of post-conventional thinking. Therefore, an intervention with a character education program would create an environment that curtails cheating. What’s more, faculty play a significant role in promoting academic integrity. The literature illustrated that faculty consequences for academic dishonesty were most effective through involved, consistent application. Responsibility for academically dishonest behaviors belongs not only to students, but faculty as well. Implementing new academic dishonesty policies, such as honor codes, would help reduce cheating. A carefully crafted and enacted honor code at Armenian high schools would codify, consolidate, and elevate a culture of academic integrity supported by faculty and students alike. McCabe & Trevino (1996) stated that implementing an honor code with a culture of academic integrity on campus while collaborating with the students and faculty can set realistic expectation and effectively decrease dishonest behavior.

Finally, according to the findings and literature, cheating was a widespread problem in high schools. Since moral development levels and academic dishonesty related to cheating,
students and faculty must collaborate and set expectations for a culture of integrity. The findings of this study offer the faculty and students an intervention program that can create a climate of academic honesty and a culture of learning in an environment that will enhance integrity.

Alschuler and Blimling (1995) discovered that students who cheated recognized that it was morally wrong, a finding that compelled the researchers to examine academic values, academic integrity, and campus culture more so than student justifications for cheating. Alschuler and Blimling (1995) articulated five elements that may have contributed to academic integrity and deterred cheating. The first involved having continuous and vocal support from the principal. Students learned the significance of honesty in speeches. The second entailed implementing an academic integrity code that was collaborative and inclusive of all stakeholders. Third, “faculty members, acting in unison, can help to change the norms that support the conspiracy of silence and the disregard that nurtures dishonesty” (p. 125). Fourth, an institutional force was necessary for faculty to access support systems through procedural details. Last, a change in campus culture could not move forward without student involvement. With regard to academic honesty, students could have participated by forming academic integrity codes, spreading to peers knowledge about academic honesty, proctoring exams, and seizing opportunities to serve on disciplinary boards that evaluated matters related to academic honesty (Alschuler & Blimling, 1995).

Programs that supported learning through the lens of moral values, ethics, and citizenship could bolster the ethical foundation of educational institutions. For example, implementing an effective character program may have educated students towards a more ethical character. Lickona (1996) defined character education as:
the deliberate effort by schools, families, and communities to help young people understand, care about, and act upon core ethical values" [1]. While one can certainly make a case for other models of moral education, advocates of character education believe the breadth and directness of their approach offer the most promising response to the social-moral problems that beset modern societies. (p. 93)

**Implications.** This quantitative, relational study explored the relationship between the moral reasoning levels of Armenian private high school students in Southern California and their attitudes toward academic dishonesty, and the extent to which, if at all, this relationship was moderated by goal orientation. The study aimed to address gaps in the literature by using Kohlberg’s (1958) theory of moral development to examine how academic dishonesty, such as cheating, was associated with the moral development level of Armenian private high school students in Southern California, and the extent to which, if at all, this relationship was moderated by the degree of students’ performance orientation. No prior research was known to have been done with this specific cultural group in a high school setting.

The results of the study and review of the literature recognized several areas that merit further investigation. Studying with greater depth the relationship between moral development and cheating behavior would offer value to researchers and high schools seeking to develop and implement more strategic plans to enhance academic integrity. The data indicated that personal factors such as gender, GPA, and cheating culture had a greater impact on cheating (McCabe et al., 2001). However, the data showed no correlation between these variables and cheating.

The majority of the literature reviewed for this study examined cheating behavior, and the cheating culture in which students demonstrated their adherence towards or against academic integrity. The literature also looked at performance orientation and its effect on cheating. Further,
the literature and data showed the consequences of cheating, and the importance of reinforcing
coples in Armenian high schools in order to decrease academic dishonesty.

**Recommendation for Future Researchers.** Given the findings and the review of the
literature, there exists a need for future research on moral reasoning levels, academic dishonesty
character education, and the promotion of academic integrity. Some institutions maintained that
certain students will, regardless of its unethical nature, engage in cheating behavior (Bacha &
Bahous, 2010). When high school students displayed ethical values, they may be better prepared
to honestly confront the world’s challenges (Bates, 2009).

Examining high school students’ moral reasoning and attitudes on cheating with
Kohlberg’s levels of moral development provided insight into the discrepancy between ethical
and unethical behavior. The study aimed to address gaps in the literature by using Kohlberg’s
(1958) theory of moral development to examine how academic dishonesty, such as cheating, was
associated with the moral development level of Armenian private high school students in
Southern California, and the extent to which, if at all, this relationship was moderated by the
degree of students’ performance orientation. No prior research was known to have been done
with this specific cultural group in a high school setting.

- The study examined the relationship between the moral reasoning levels of Armenian
  private high school students and their attitudes toward academic dishonesty moderated by
  student performance orientation. However, having an alternative moderator, such as
  moral reasoning, could impact students cheating levels.
- Future motivation research should be examined in correlation to cheating and
  achievement (classroom goals-mastery orientation) when it related to moral development
  and decision-making components.
The study examined students’ moral development in relation to students’ cheating behaviors. Further research on developmental factors that leads to students’ moral development after high school is a topic that could enrich the field.

There is currently extensive research on the status of cheating in high schools. The cheating is persistent and ubiquitous. However, there is limited research on students who cheat in high school and the effect of such behavior after graduation.

To increase response rates, the researcher could administer surveys at different times of the school year (beginning of each trimester). According to the data collected, tenth graders comprised the largest group of respondents (48.6%), and the least represented group was that of the twelfth grade (8.6%). It is suggested that seniors might have had college on their minds, therefore, they were influenced by their future plans of attending universities and not cheating behaviors.

The study focused on contextual factor and individual factors affecting cheating. The data indicated the individual factors affecting cheating – such as age, gender, and GPA – did not correlate with cheating. In fact, these factors had no significance when it came to academic dishonesty. Future studies can examine cheating in depth through the relationship with contextual factors such as honor codes, peer behavior, and culture of integrity. High school teachers and administrators can more clearly demonstrate and reinforce their expectations from students regarding cheating, and clearly define cheating behaviors at the beginning of every semester. All high school students can contribute to creating a culture of integrity. Incoming freshman can participate in training at the start of their high school careers. This training should continue through open discussion sessions before the beginning of each semester.
Investigating the role of faculty in cheating can be extended. School administrators may have represented the “missing link.” Some faculty members overlooked academic dishonesty because it was ignored or misunderstood at the administrative level. More communication between deans, administrators, and faculty could have best addressed these issues (Brown et al., 2010). The lack of communications stemmed, in part, from deans and administrators not having full awareness of the academic dishonesty in their respective schools. Deans also did not believe students engaged in this conduct at high frequencies (Brown et al., 2010). Instead of increasing communication between deans and faculty, administrators felt that including ethics classes in the required curriculum would address the issue (Brown et al., 2010).

Future studies can examine the relationship between the moral reasoning levels of Armenian private high school students in different countries/populations, and their attitudes toward academic dishonesty moderated by student performance.

Moreover, the study intended to give high school teachers information for raising the awareness of academic expectations for high school students at Armenian schools. To the researcher’s knowledge, no rigorous study had been carried out on academic dishonesty in an Armenian academic context. The study has many implications for educators in private Armenian schools in North America, South America, Europe, and the Middle East who are interested in developing classroom-based interventions to reduce cheating. This study suggests that effective classroom interventions may curtail cheating in schools internationally.

In addition to the above recommendation and given the findings and the literature, there also is a need for future research on moral reasoning levels, academic dishonesty character education, and the promotion of academic integrity. In order to implement academic integrity,
the creation of an Academic Integrity Committee that includes all stakeholders – such as the principal, faculty, parents, and students – should be established. This committee would focus on the following: education, implementing classroom goal structures, policy, communication, and record keeping. For example, the committee can focus on an effective character education program that can orient students towards more ethical characteristics.

Institutions and programs that support learning through the lens of moral values, ethics, and citizenship can also bolster the ethical foundation of educational institutions. For example, the International Center for Academic Integrity (ICAI) organizes conferences, workshops and presentations on campus’ by experts in the field of academic integrity. Their mission seeks “to combat cheating, plagiarism, and academic dishonesty in higher education...[and] the cultivation of cultures of integrity in academic communities throughout the world” (‘ICAI Cultivating Integrity Worldwide,” n.d.). ICAI provides a Guide that directs the Academic Integrity committee to the following implementation tasks:

- Evaluating the effectiveness of your current academic integrity programs and policies
- Assessing student and faculty attitudes and behaviors in classrooms, labs, and exams
- Identifying potential concerns from sanctions to educational programs
- Developing action plans to improve understanding the importance of academic honesty
- Promoting open dialogue about academic integrity issues on your campus
- Survey instruments for students and faculty, followed by a confidential, customized report of findings
- Guidelines for putting together an effective academic integrity assessment committee
- Step-by-step instructions for generating or revising policies, practices, educational programs and sanctions
Suggested assessment and educational activities and questions for focus groups

Examples of codes, and policies from campuses across the country

Copies of relevant reading materials and bibliographies.

(“ICAI Assessment Guide,” n.d.)

Cheating may have also increased with the student grade level, an important trend for educators to track in their classrooms and campuses. According to Murdock et al. (2001), teacher and faculty involvement will provide positive social climates, accentuated mutual trust, respect, and caring with an emphasis on classroom academic goal structures that could restrain cheating in schools. Establishing and encouraging teacher-student relationships by focusing on mastery also contributed to less cheating in the classroom (Murdock et al., 2001). “Academic integrity is a fundamental value of teaching, learning, and scholarship. Finally, “having a guide will improve the culture of integrity on campuses in a proactive, positive way” (http://www.academicintegrity.org).

**Conclusion.** This study examined the concerns of cheating, and the moral development of Armenian high school students. Academic cheating is a pervasive problem in high schools across the nation. “Today’s high school and college students openly admit that academic cheating has become both pervasive and expected...Historically, the Academic Integrity Survey tends to find self-reported cheating rates for around 80% to 90% of students who cheat prior to graduating from high school, which is higher than found in our population of Armenian high school students” (Anderman & Murdock, 2006, p. 129). According to the data, cheating culture characteristics do exist at this Armenian institution. However, it is not as high as the self-reported cheating rates of the Academic Integrity Survey. Additionally, severity of penalties for cheating was determined by the high school; faculty understood and supported campus policies
concerning student cheating; and there was an average student understanding around campus policies on student cheating. Additionally, according to the data, the student subjects believed cheating helped achieve a goal, and recognized that everyone around them cheated in order to succeed. However, the students agreed that cheating behavior was not acceptable. The study supported the literature by identifying students who cheated and the reason for their behavior. Furthermore, cheating has risen in the past 50 years. Therefore, involvement of all stakeholders (administration, students, and parents) can have a positive effect on academic honesty on high school campuses. The findings of the study will offer high school leaders with pertinent material that can be utilized to decrease cheating and develop the integrity of the school and its culture.
REFERENCES


International Center for Academic Integrity. (n.d.). Retrieved from: [https://academicintegrity.org/about/](https://academicintegrity.org/about/).


APPENDIX

Reasons Students Engage in Academic Dishonesty

<table>
<thead>
<tr>
<th>Why Do Students Engage in Academic Dishonesty-Cheating</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades-want or need to make better grades</td>
<td>92</td>
</tr>
<tr>
<td>Procrastination</td>
<td>83</td>
</tr>
<tr>
<td>Too busy, not enough time to complete assignment or study for test</td>
<td>75</td>
</tr>
<tr>
<td>Lack of understanding or unable to comprehend information</td>
<td>58</td>
</tr>
<tr>
<td>No interest in the subject or assignment</td>
<td>50</td>
</tr>
<tr>
<td>Workload/schedule: too many classes</td>
<td>33</td>
</tr>
<tr>
<td>Everyone does it and get away with it</td>
<td>25</td>
</tr>
<tr>
<td>No big deal; not matter to professor</td>
<td>17</td>
</tr>
</tbody>
</table>