ACADEMIC INTEGRITY AND PERSONALITY

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Abstract

of

ACADEMIC INTEGRITY AND PERSONALITY

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Academic Integrity is a serious issue facing academia. This research attempted to find relationships between academic integrity and the five factors of personality (neuroticism, extraversion, openness, agreeableness, and conscientiousness), an individual’s self-esteem, anxiety, depression, locus of control, self-control, and social desirability. The Academic Integrity Assessment assessed the participants’ level of academic dishonesty. The sample consisted of 211 college students. Eighty-six percent of participants admitted to cheating at least once within the past year. The results indicate that those with higher levels of academic dishonesty were lower in self-control and tested higher in neuroticism, openness, state anxiety, and depression. The results also indicate that those who reported lower academic dishonesty also reported more socially desirable responses. A regression analysis found that higher levels of openness and lower levels of seriousness of cheating and self-control predicted Academic Dishonesty.

_______________________, Committee Chair
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_______________________
Date
DEDICATION

I would like to thank my husband, my family, and my friends for their enduring support and encouragement on this long road. There have been many times that I thought this an impossible task, and continued only with your support and encouragement. To my husband, Matt, life is a long journey thank you for walking beside me.
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Chapter 1

INTRODUCTION

Each day college students are faced with hard decisions regarding honesty, trust, respect, fairness, and responsibility. These words together define a set of fundamental values which shape student’s level of academic integrity (“Center for Academic Integrity,” 1999). Research indicates a significant number of college students, approximately 75 percent, have cheated at least once during their undergraduate careers (“Center for Academic Integrity,” 1999; Davis, Noble, Zak, & Dreyer, 1994; McCabe & Travino, 1993). This finding along with others has lead to a national conversation regarding academic integrity. In fact, some believe that academic dishonesty is an epidemic (Davis et al., 1994). Academic dishonesty is a major problem facing academia and researchers are trying to learn more about the related factors (McCabe & Travino, 1997).

Singhal (1982) noted that “cheating has become one of the major problems in education today.” Similar thoughts to this have been noted throughout history (Callahan, 2004; McCabe & Trevino, 1996). In 1930 Time ran a story “Cheating at Yale” which described the belief that conservatively half of Yale undergraduates were guilty of breaking the school rules during exams. The offense was cheating, and the penalty students faced was expulsion along with public stigma and loss of honor (“Cheating at Yale,” 1930). Indeed, academic dishonesty is not a new phenomenon; in fact, it has plagued civilizations for centuries. In Ancient China the death penalty was commonly
used as a deterrent for both cheaters and proctors and still there were those who engaged in the behavior (Bushway & Nash, 1977). Through the evolution in American higher education academic integrity and dishonesty have existed (Gallant, 2008).

Prior to the Civil War American colleges were governed by an authoritarian style based on the religious beliefs of the time. Detailed codes of conduct were established to shape students’ moral and social conduct (Dannells, 1997). Teacher and tutors would enforce the codes of conduct with a range of punishments including extra assignments, expulsion, physical abuse (i.e., flogging), or even death (Dannells, 1997). Out of this adversarial relationship between students and their educators rose cheating behaviors such as crib notes (Gallant, 2008).

Later during this period the first college honor code was developed at the College of William and Mary. The code describes misconduct as “telling a lie or doing anything contrary to good manners” (Gallant, 2008). Some argue that this honor code was developed not by faculty but by students out of their southern culture (Dannells, 1997). The honor code was more focused on preserving a student’s self-worth, esteem, and reputation rather than preventing or stopping cheating behaviors. In fact, during this period students could use the honor code as a justification for cheating in order to preserve one’s honor (Gallant, 2008).

After the Civil War there was a shift in education and discipline; this era became known “as one of disciplinary enlightenment” (Smith, 1994 as cited in Dannels, 1997). This enlightenment brought with it a more positive view of students as capable adults able to making decisions about their conduct (Dannels, 1997). In fact, Charles Eliot, the
president of Harvard during the turn of the century, was influential in this shift. Eliot believed,

True university colleges should give its students three essentials; first freedom of choice in studies; second, opportunity to win distinction in special lines of study; and finally, a system of discipline which imposes on the individual himself the main responsibility for guiding his conduct.

(Dannels, 1997, p. 7)

It was also during this era that research became an essential function for colleges, faculty, and students (Dannels, 1997; Gallant, 2008). The professional status of faculty members became increasingly linked to their ability to produce original research and thus their teaching role shifted in this direction as well (Gallant, 2008). Faculty trained in research found the monitoring of student conduct to be a demeaning task (Dannels, 1997). Thus, discipline and conduct matters were eventually delegated by the President of colleges to Deans, student government, and honor systems (Dannels, 1997).

Deans and student groups changed the face of discipline from authoritative to the development of a “whole student” (Dannels, 1997, p. 8). This philosophical approach focused on an ultimate goal of student self-control and discipline. During this period students became increasing part of the disciplinary system with counseling as a popular corrective plan (Dannels, 1997). Unfortunately, the expectations were largely unmet and students did not evolve morally (Gallant, 2008). In fact, students became increasingly disinterested in research theories which created a greater divide between students and
faculty. Additionally, the manner of instruction and testing also resulted in greater opportunities for cheating (Gallant, 2008).

Despite attempts to gain ground in academic misconduct, student cheating continued to be problematic throughout this era. Students were known to share exam questions, obtain advanced copies of exams, pre write essay answers in exam booklets, and share information related to course content, homework, and papers (Gallant, 2008). As a result, educators and colleges took steps beyond creating codes of conduct and changed testing procedures to limit cheating. Faculty would prohibit the use of notes or possession of books and belongings during exams, they would space students apart from one another during exams, and they would check photo identification cards to prevent professional imposter test takers from sitting in for exams (Gallant, 2008). These methods were useful for exams, but did not account for misconduct related to homework, projects, and papers (Gallant, 2008). Research at that time found a significant percent (40%) of students were engaging in cheating behaviors with minimal public concern (Gallant, 2008).

In 1909 the Copyright Act was passed representing increased emphasis on the creation of original works and the need to protect intellectual property (Gallant, 2008). The passing of the Act lead to a greater need for institutions to create a system that was capable of deterring cheating behaviors while also teaching students about academic integrity (Gallant, 2008). This proved to be difficult and required greater regulation of student writing behaviors to avoid copyright infringement. Over the years the Act has
been revised in order to encompass the needs of the times and to protect intellectual property from those willing to claim it as their own (Gallant, 2008).

After World War II colleges and universities experienced an increase in both the number and the diversity of students (Dannells, 1997; Gallant, 2008). Higher education, once thought of as a privilege, was now seen as a right (Gallant, 2008). Opportunities arose for those of varying socioeconomic status, race, and gender. It was also during this time that the GI Bill provided funding for higher education (Dannells, 1997; Gallant, 2008). With the changes in the student landscape came questions regarding accountability from both the public and the government. In fact, “some writers suggest that academic misconduct was a direct outcome of the rapid expansion of postsecondary education.” (Gallant, 2008, p. 21)

This era was marked by political scandals such as Watergate and academic scandals which resulted in the public’s belief that cheating was the norm (Gallant, 2008). Scandals regarding research integrity resulted in research ethics and human subjects standards. From 1964 to 1975 there were several highly publicized cheating scandals, one of which was a “term paper industry” (Gallant, 2008, p. 21). This industry involved purchasing written papers from strangers or friends, recycling papers, or use of a bank of papers available to fraternity or sorority members (Gallant, 2008). In 1971, 600 students from the University of Wisconsin alone were investigated for cheating (Gallant, 2008). These stories lead to the realization that students not only had ready access to cheating materials, but that they were accessing them in large numbers.
Bowers (1966), a Columbia University doctoral candidate, conducted one of the first studies regarding cheating on college campuses. His research surveyed over five thousand college students from almost one hundred campuses across the United States. The study revealed that about half of those surveyed engaged in one or more forms of cheating behavior (Bowers, 1966). Furthermore, half of those whom admitted to cheating also indicated that they had engaged in more than one form of cheating (i.e., plagiarism and cheating on an exam). The results also indicate that the majority of these students were never caught, and that they perceived punishments for academic misconduct as lenient (Bowers, 1966). Bowers researched, the “term paper industry” scandal, and additional research lead faculty and the general public to recognize that cheating in higher education was prevalent and tolerated. Higher education in American was facing a cheating crisis (Davis, Drinan, & Gallant, 2009; Gallant, 2008).

At the height of the media attention regarding academic dishonesty, universities began to create policies and procedures regarding academic integrity (Gallant, 2008). These policies and procedures were the result of public perceptions, the volume of students engaging in the behaviors, and the fact that the accused were afforded due process (Dannells, 1997; Gallant, 2008). To avoid federal courts from intervening in academic matters, the policies and procedures encompassed the students’ First and Fourteenth Amendment rights (Dannells, 1997). Thus, the policies and procedures replaced the long standing honor codes (Dannells, 1997; Gallant, 2008).

As institutions attempted to manage both student cheating behaviors and the publics perception of higher education, the financial climate began to change. Through
the seventies and early nineties universities experienced a decrease in public funding (Gallant, 2008). Funding decreases lead to increases in private funding, tuition, and competition among students to secure admittance to higher education, graduate schools, and access to financial aid. With increased external funding came increased expectations from the general public, parents, and students. This period became known as the commercialization of postsecondary education (Bok, 2003; Gallant, 2008).

Commercialization and increased competition in higher education through the 1970s led to changes and increases in academic dishonesty. The competitive-atmosphere led students to develop and employ overtly independent acts of cheating (Gallant, 2008). Students stole library books, removed pertinent pages from books, and changed variables during practical exams to gain an advantage over other students. Those applying to graduate would hire test takers or individuals to write counterfeit letters of recommendation. This manner of cheating was a departure from cooperative efforts seen in earlier decades (Gallant, 2008).

These increases or changes in cheating can be explained by “Campbell’s Law.” Campbell (1976) wrote that when test scores become the goal then tests lose their value and the value becomes distorted from the original intent. Here it indicates that the higher the stakes the greater likelyhood of cheating (Davis et al., 2009). As students progress through their educational experience the stakes become higher due to the need to perform for self, parents, scholarships, graduate programs, future employment, and generally “success in life.” Through the commercialization of education, and the expectation that high school and college are the minimum societal standard for education
students focus on achieving grades in higher education rather than the importance of achieving an education (Davis et al., 2009).

As trends of student cheating grew, Dr. Donald McCabe began researching and publishing articles on academic integrity. McCabe conducted a multi-campus study similar to the Bowers study and found strikingly similar results. McCabe’s (1992) research tested over 6000 students from 31 universities across the United States. McCabe’s results indicated that over two-thirds of students surveyed had cheated at least once as an undergraduate and one-fifth “could be classified as active cheaters” (admitted to cheating 5 plus times within the last 6 months; McCabe, 1992, p. 367). Students were also asked to rate influential factors of their cheating behaviors. The highest ranked were the pressure to get “good grades,” parental expectations, and possible admittance to graduate schools. While these results were similar to Bowers’ (1966) study, McCabe (1992) found higher rates overall in addition to greater responses of denial and justifications for cheating.

In 1992 McCabe organized a conference to review and discuss the results of his multi-campus study. During the conference professors from colleges around the United States proposed the creation of a center devoted to the study of academic integrity. Later that year the Center for Academic Integrity was founded (Center for Academic Integrity [CAI], 2007). Within the first year CAI had 24 university members; to date that number has grown to over 360 universities and the center receives grant funding from the William and Flora Hewlett Foundation and the John Templeton Foundation. The center provides a medium in which students, faculty, and administrators can work together to
promote academic integrity through research, assessment, and policies that promote ethics in education (CAI, 2007).

As McCabe continued his research the very landscape he was examining began to change. Technology introduced a vast array of cheating opportunities to students. Through the 1990s and into the twenty first century students gained access to technology that fundamentally changed education (Davis et al., 2009; Gallant, 2008; Lathrop & Foss, 2000; Sutherland-Smith, 2008). Advances in technology expanded the educational experience through greater access to resources and global information. Additionally, students gained new instruments, resources and options to utilize when cheating.

From the calculator watch fad of the 1980s to the advent of programmable calculators, pagers, cell phones, personal computers and the internet, education was evolving and students were provided with new instruments to utilize and exploit. While technology has provided vast legitimate uses for students and educators, some students have discovered uses beyond their original intent (Gallant, 2008; Lathrop & Foss, 2000; Southerland-Smith, 2008). Information can be accessed, transferred, created, and dispersed quickly and discreetly. Where students once passed notes in class they now send electronic text messages, program calculators with formulas, and use cell phones to acquire needed answers and information during exams (Gallant, 2008; Lathrop & Foss, 2000; Southerland-Smith, 2008).

The aforementioned term paper industry of the 1960s and 1970s has evolved through technology (Gallant, 2008). In 1996 several internet based web sites began producing and selling term papers. Today these sites have expanded, providing services
that include, topic, length, and references all within a student’s designated time frame (Gallant, 2008). The cost of these papers ranges from $7 to $20 a page. Investigational reports conducted by CNN, CBS, and 60 Minutes indicate that one site alone receives, conservatively, a quarter million searches each day (Safer & Naphine, 2002; Sieberg & Smith, 2008; Slobogin, 2002). It was also reported that over a 6 year period schoolsucks.com provided over 26 million downloaded papers to students, 80 percent of which were Americans (Sieberg & Smith, 2008). With students engaging in cheating at an alarming rate, internet based services to combat student cheating have also emerged. Internet based companies such as tunitin.com offer electronic plagiarism detection services for teachers and institutions (Safer & Naphine, 2002).

Some researchers believe that the internet is the source of increases in academic dishonesty. They believe that cheating instances have risen considerably and that technological advances provide students with vast anonymous methods of “cut and paste” cheating (Southerland-Smith, 2008; Underwood & Szabo, 2003). However, other researchers disagree and believe that cheating is somehow ingrained in the system and in the students. While researchers have proven that cheating has increased over time (McCabe, 1992, 2005; Schab, 1991) they disagree about the causes. McCabe (2005) reported that student internet cheating increased by 28% between the two academic years between 1999 and 2002. McCabe also reported that this increase did not reflect an increase in the total number of students cheating. Scanlon and Neumann (2002) reported that internet cheating is not an epidemic as others have reported. However, they also admitted that more research is needed because it is not clear how the internet and other
new technologies are affecting student’s perception of cheating and their behavior long term.

While cheating behaviors, styles, and methods have changed over time, the existence of cheating has remained permanent. Research indicates that cheating has increased over time and the true cause is still undetermined (McCabe, 1992, 2005; Schab, 1991). Researchers have examined relationships between cheating and various factors. A possible significant influence is the student’s personality.

The Five Factor Model

Personality is individual to each person and often times can assist in predicting thoughts, feelings, and actions in people. Within personality psychology five factors have been identified as overarching personality features (Costa & McCrae, 1992; Pervin, 1999). These five dimensions have been referred to as the five factor model of personality. The five factors are neuroticism, extraversion, openness to experience, agreeableness and conscientiousness (Costa & McCrae, 1992; Paulhus, Bruce, & Trapnell, 1995). These five factors can summarize an individual’s “emotional, interpersonal, experiential, attitudinal, and motivational styles” (Costa & McCrae, 1992, p. 14).

Neuroticism, as defined by Costa and McCrae (1992), is “the general tendency to experience negative affects such as fear, sadness, embarrassment, anger, guilt, and disgust” (p. 14). Thus, these individuals are emotionally reactive and vulnerable to stress. Neuroticism can lead to greater anxiety, depression, and somatic complaints (Costa & McCrae, 1988). This can make it difficult for these individuals to deal with
negative life events (Suls, Green, & Hill, 1998). In general, neuroticism is a lack of psychological adjustment and emotional stability (Costa & McCrae, 1988).

Costa and McCrae (1992) describe several personality characteristics that encompass traits of extroversion. These are sociable, assertive, and optimistic. Extroverts feel stimulated by engaging in conversation, being a part of large groups, and often have a “cheerful disposition” (Costa & McCrae, 1992, p. 15). In contrast, introverts are more reserved, independent, and even paced. Costa and McCrae (1992) indicate that it is important to recognize that introversion is not the opposite of extroversion, but rather the absence of extroversion.

Openness to experience contains elements such as: “active imagination, aesthetic, sensitivity, attentiveness to inner feelings, preference for variety, intellectual curiosity, and independence of judgment” (Costa & McCrae, 1992, p. 15). These individuals are capable of experiencing a wide range of emotions and are insightful to their inner world as well as the outer world. Other aspects include divergent thinking and creativity (Costa & McCrae, 1992).

Agreeableness is characterized by altruism and “is primarily a dimension of interpersonal tendencies” (Costa & McCrae, 1992, p. 15). Several aspects can best describe this dimension of personality. These individuals are willing to help others and they believe that others will help them in return (Costa & McCrae, 1992). Conversely, disagreeableness is characterized by egocentrism, competitiveness, and uncertainty about others’ intentions. Either extreme can lead to psychological maladjustment (Costa & McCrae, 1992).
Conscientiousness, or character, is defined by self-control (Costa & McCrae, 1992). Individuals high in conscientiousness are thought of as “purposeful, strong willed, and determined” (Costa & McCrae, 1992, p. 16). These skills are often learned during development and assist in impulse control. These characteristics often produce individuals who are high achievers. These traits can become maladaptive when they lead to compulsive and rigid behaviors (Costa & McCrae, 1992).

To date there has been limited research regarding the five factors of personality and academic integrity. De Bruin and Rudnick (2007) reported previous findings linking conscientiousness to academic performance (Chamorro-Premuzic & Furnham, 2003; DeBruin & Rudnick, 2007; Paunonen & Ashton, 2001). Given these findings DeBruin and Rudnick (2007) narrowed academic performance to academic dishonesty (premeditated cheating) and attempted to find a relationship with conscientiousness. They tested 683 college students, 38% of which admitted to cheating at least once (DeBruin & Rudnick, 2007). Their results revealed a negative relationship between conscientiousness and academic dishonesty (DeBruin & Rudnick, 2007).

In 2009 Malaysian researchers Karim, Zamzuri, and Nor studied the relationship between unethical internet variables (i.e., misuse, plagiarism, fraudulence, and falsification) and the big five personality factors. The research revealed significant results. Karim et al. (2009) found that individuals with high levels of agreeableness were less likely to engage in internet misuse. Those with higher conscientiousness scores were less likely to engage in fraudulent behavior, plagiarism, and misuse (Karim et al., 2009). Finally, they found that those with higher scores of neuroticism were more likely to
engage in plagiarism (Karim et al., 2009). Karim et al. (2009) acknowledged the need for additional research since no other similar studies could be found. The present study will attempt to expand on and contribute to the limited research available in terms of the five factors of personality and academic integrity.

Self Esteem

Self-esteem encompasses the evaluations that individuals make about themselves (Coopersmith, 1967). “It expresses an attitude of approval or disapproval and indicates the extent to which an individual believes himself capable, significant, successful, and worthy” (Coopersmith, 1967, p. 5). Theorists and psychologist alike have expressed the importance of self-esteem in achieving self-worth, personal satisfaction, and effective functioning (Coopersmith, 1967; Croker, 2002). Researchers have found evidence linking self-esteem to deviant behavior including academic dishonesty (Aronson & Mette, 1972; Ward, 1986; Wells, 1989). Individuals with low self-esteem are prone to engage in dishonest behavior such as cheating (Aronson & Mette, 1972).

Ward (1986) found that women with high self-esteem were less likely to engage in dishonest cheating behaviors. In fact, 87% of the women with high self-esteem did not admit to engaging in cheating practices (Ward 1986). Within Ward’s study (1986) men’s self-esteem status was unrelated to cheating behaviors. Iyer and Eastman (2006) tested 353 business and non-business majors and found overall that those with low self esteem were more likely to cheat than others (Iyer & Eastman, 2006). Alarape and Onakoya (2003) tested 250 college age students and found significant results regarding self-esteem and cheating behavior.
Other researchers have found varying results regarding the relationship between self-esteem and academic integrity. Tang and Zuo (1997) attempted to test self-esteem as a protective factor related to academic dishonesty. Thirty nine percent of those tested indicated that they had cheated on college exams. Tang and Zuo’s (1997) hypothesis was not supported by their findings and indicated a need for additional research. Anzivino (1996) was also unable to find significant results regarding self-esteem and academic dishonesty. However, she did note a slight, nonsignificant, negative relationship between self-esteem and academic dishonesty (Anzivino, 1996). Fields (2003) tested 315 undergraduate students in the areas of psychological type, self-esteem, and academic dishonesty. Fields (2003) yielded no significant results related to self-esteem and academic dishonesty.

Croker (2002) has termed self-esteem as a contingency of self-worth. This refers to an individual’s need to satisfy a standard of competency in order to maintain one’s self-esteem. Each individual’s sense of self competency is expressed both verbally and through their behaviors (Coopersmith, 1967; Croker, 2002). Niiya, Ballantyne, North, and Croker (2008) reported that while results have been mixed regarding self-esteem and academic integrity, they found that self-worth can motivate or deter cheating. Niiya et al. (2008) reported that contingencies of self-worth are predictors of cheating for men. They report that individuals avoid failure and work to achieve success in order to maintain feelings of self-worth (Niiya et al., 2008).
Anxiety

Anxiety is defined as uneasy anticipation of the future, which is filled with fear, worry, and apprehension (Janda, 2001). Spielberger (1983) has identified two facets of anxiety. These facets can be described as “anxiety as a generalized trait (anxiety proneness) and anxiety as an emotional state or response evoked by situational stressors that are perceived as threatening” (Spielberger, Diaz-Guerrero, & Strelau, 1990, p. 3). Thus, there is a differentiation between an individual’s long term or stable anxiety (trait) and their current or situational-based anxiety (state). Research has linked test or academic anxiety (state anxiety) to increased levels of cheating among students (Shelton & Hill, 1969; Spielberger et al., 1990; Steinger, Johnson, & Kirts, 1964).

Researchers Shelton and Hill (1969) studied the effects of anxiety and knowledge of peer performance on academic dishonesty. Shelton and Hill (1969) believed that anxiety is related to cheating due to general negative feelings associated with failure. Their experiment provided students with an opportunity to falsify their test scores. Sixty-one percent of the students engaged in this cheating act (Shelton & Hill, 1969). As the researchers had predicted, anxiety scores were positively correlated with the cheating behavior (Shelton & Hill, 1969).

Antion and Michael (1983) attempted to find a relationship between cheating behavior (i.e., cheating instances and cheating amounts) and demographics, affective constructs, and personal variables. The sample was made up of 148 college students in an introductory psychology course. Overall, the results did not support the hypothesis of relationships between cheating behaviors and personality constructs, with the exception
of anxiety (Antion & Michael, 1983). The results yielded a correlation coefficient of .22 
\(p < .05\) indicating a positive relationship between cheating behaviors and anxiety 
(Antion & Michael, 1983).

Malinowski and Smith (1985) research found similar results regarding anxiety 
and cheating behavior. Here the subjects were 53 male college students who were 
provided with false practice scores to increase the temptation to cheat. Malinowski and 
Smith (1985) hypothesized that “under test like conditions, the higher the test anxiety, 
the greater the incidence of cheating and the sooner cheating will begin” (p. 1019). 
Seventy-seven percent of the subjects cheated at least once during the experiment. The 
ANOVA revealed a significant main effect “for test anxiety on trials cheated, \(F(1, 49) = 
4.56, p < .04\)” (Malinowski & Smith, 1985, p. 1023). Thus, results confirmed this 
hypothesis.

Wowra (2007) reported that feelings of anxiety are common among college 
students. According to Wowra (2007), test anxiety is positively correlated to social 
anxiety, thus leading to the formation of the social anxiety hypothesis. This hypothesis 
states “a highly anxious student compensates for anticipated decrements in concentration 
by bringing crib sheets and other cheating devices into the testing environment” 
(Wowra, 2007, p. 304). The results confirmed the hypothesis and found that cheating 
was positively correlated to social anxiety, \(r = .25, p < .05\) (Wowra, 2007). Although the 
results are weak, they do indicate that anxiety states are important to the study of 
academic dishonesty.
In 2008 Greenberger, Lessard, Chen, and Farruggia looked at academic entitlement, academic cheating and personality variables. Overall they found that between 51.1% and 60.7% of students reported cheating (Greenberger et al., 2008). These acts ranged from working cooperatively on an assignment to cheating on an exam. Although they found strong significance related to academic entitlement and academic dishonesty, they did not find significant results between anxiety and academic dishonesty (Greenberger et al., 2008).

Depression

Depression, like academic integrity, is a significant issue facing many college students today (Oswalt & Finkelberg, 1995). Depression symptoms have been described as low mood, pessimism, self-criticism, agitation, cognitive difficulties, hopelessness, guilt, fatigue, social withdrawal, sleep disturbances, anxiety, and somatic complaints (Beck, 1967; Beck, Steer, & Brown, 1996). Oswalt and Finkelberg (1995) sampled 149 college students and found that 90% reported that they were currently, or had been, depressed at some point during their college experience. Of those who reported depression, for most it was moderate and short in duration and associated with social stressors, adjustment, academic stressors, and grades. Limited research is available regarding depression or mood related to academic dishonesty.

Craciun’s (2007) study was the only research found that explored a relationship between mood states and cheating behavior. She used Andrade’s (2005) model regarding causal influences of affect on behavior. This model states that “current affective states have a mood-congruent effect on behavior” (Craciun, 2007, p. 33). Thus, individuals in
positive-affective states will be more prone to engaging in risky behaviors due to their affective state (Andrade, 2005; Craciun, 2007). This propensity translates to positive-affect individuals considering positive information associated with their behavior (i.e., possible gains, higher grades) more than negative information (i.e., potential risks, expulsion for cheating). Thus, the model suggests that positive-affective states may increase cheating behavior due to the lack of focus on negative consequences and a stronger focus on positive outcomes (Andrade, 2005; Craciun, 2007).

Craciun’s (2007) study tested 110 graduate students on the basis that mood states would affect their cheating behavior. Craciun (2007) used a mood induction task to elicit either positive or negative moods in subjects (i.e., happy and sad). Subjects were asked to write about a vivid recent life event that produced either positive or negative feelings. Once the task was completed they rated their mood and then completed a test which provided an opportunity for cheating (Craciun, 2007). The results indicated that those in a positive-mood state cheated significantly more than those in a negative-mood state. Cracium (2007) reported that “contrary to popular wisdom people in a positive mood were more likely to cheat on a test than were people in a negative mood” (p. 46).

**Locus of Control**

Locus of control is a concept of perceived control over an individual’s life (Anastasi & Urbina, 1997; Rotter, 1966, 1989). Locus of control is divided into two hemispheres: internal and external. Internal locus of control refers to an individual’s belief that his or her own behaviors and personal characteristics predict success (Anastasi & Urbina, 1997; Rotter, 1989). External locus of control refers to an
individual’s belief that his or her successes are the result of chance, luck, fate, or powerful others (Anastasi & Urbina, 1997; Rotter, 1989). Researchers have found significant results regarding academic dishonesty and external locus of control.

Karabenick and Srull’s (1978) research provided subjects with an opportunity to cheat. The experimental conditions varied only by the directions provided. The chance condition (external locus of control oriented) subjects were led to believe that the test results would be purely determined by chance, not ability (Karabenick & Srull, 1978). The skill condition (internal locus of control oriented) was told that the test required abstract reasoning and was a good indicator of a high level of intelligence. The results indicated that “cheating was an interactive function of the personality and situational determinates of locus of control” (Karabenick & Srull, 1978, p. 80). The results indicate that externals in the chance condition (externally oriented) cheated more frequently (Karabenick & Srull, 1978).

Alarape and Onakoya (2003) tested 250 Nigerian college students on their cheating behaviors and personality variables including locus of control. Alarape and Onakoya’s (2003) study yielded significant results among a number of the factors. Locus of control had a significant negative relationship with cheating behavior. The results indicated that external locus of control individuals reported greater cheating (Alarape & Onakoya, 2003).

Houston’s (1977) study explored a possible relationship between cheating and locus of control. Houston (1977) used Rotter’s Internal External Locus of Control Scale and a scale identified by Collins (4 sub scales of Rotter’s scale). The results did not
yield significant results (Houston, 1977). These results are consistent with the finding of Thorpe, Pittenger, and Reed (1999).

**Self-Control**

Researchers have linked the personality variable self-control to academic dishonesty (Bolin, 2004; Cochran, Wodd, Sellers, & Chamlin, 1998; Grasmick, Tittle, Bursik, & Arneklev, 1993). Gottfredson and Hirschi’s (1990) theory of crime addresses the interaction of a lack of self-control and perceived opportunity as major causes of all deviant behavior, including academic dishonesty. Gottfredson and Hirschi (1990) indicate that high self-control “effectively reduces the possibility of crime” (p. 89). According to their theory, a lack of self-control is the root of deviant behavior and while it does not guarantee the existence of it, a lack of self-control does produce instant gratification behaviors (Gottfredson & Hirschi 1990). Based on this theory researchers have found a relationship between self-control and academic dishonesty (Bolin, 2004; Cochran et al., 1998; Grasmick et al., 1993).

Bolin’s (2004) research looked at the role of self-control, cheating attitudes, and perceived opportunity to cheat as possible predictors of cheating behavior. Bolin’s (2004) sample was 799 college students from campuses across the United States. The results indicate that attitudes toward cheating mediated the relationship between self-control and reported cheating behaviors (Bolin, 2004). The results did not find significance linking self-control directly to cheating behaviors. However, these results do provide evidence that self-control does play a role in students’ cheating behaviors (Bolin, 2004).
Jones and Quisenberry (2004) noted that Gottfredson and Hirschi’s theory of crime has been used to predict several forms of deviant behavior. This study attempted to explore possible limitations by determining if self-control influences other deviant behaviors such as risky driving, risky sex, and academic dishonesty (Jones & Quisenberry, 2004). Jones and Quisenberry (2004) also explored if self-control influenced socially acceptable risky behaviors. They sampled 254 college students and found significant results regarding self-control and academic dishonesty ($p < .05$). Jones and Quisenberry (2004) noted that they found significant results indicating that self-control is related to both risky deviant behaviors and risky socially acceptable behaviors.

Cochran, Wood, Sellers, and Chamlin (1998) also based their hypothesis on Gottfredson and Hirschi’s self-control theory. Here they used academic dishonesty as a possible behavior that is affected by an individual’s level of self-control. Using a regression analysis, while controlling the influence of the other variables, the results revealed a significant inverse effect ($b = -.25$, $\beta = -.21$, $p < .05$) between self-control and academic dishonesty (Cochran et al., 1998). Thus, those individuals with higher self-control are less likely to cheat. They also found interactive significance between self-control and opportunity on cheating. Cochran et al., (1998) reported their findings as strong support for the direct and interactive effect of self-control on academic dishonesty.

*Social Desirability*

Social desirability is the “tendency to give positive self-descriptions” (Paulhus, 2002, p. 49). These positive self-descriptions, or socially desirable responses, are used to
avoid negative evaluations by others. Socially desirable responses are defined as “the tendency to give overtly positive self descriptors” (Paulhus, 2002, p. 50). Paulhus (2002) highlighted his use of the term ‘overtly’ and emphasized the importance that socially desirable responses are a departure from reality (Paulhus, 2002). Given the taboo nature of academic dishonesty and cheating, it is possible that some students have denied or minimized their participation in such activities, even in anonymous testing conditions (Paulhus, 2002; Thorpe, Pittenger, & Reed, 1999).

A student’s denial or minimization can create response bias. Response biases are a “systematic tendency to answer questionnaire items on some basis that interferes with the accurate self reports” (Paulhus, 2002, p. 49). Thus, individuals may choose socially desirable responses, minimized responses, or agree with statements regardless of the content. This type of responding according to Crowne and Marlowe (1964) is motivated by a need for approval. Crowne and Marlowe (1964) state that this has been a “perennial source of frustration to psychologists in their quest for the grail of successful prediction” (p. 3).

Thrope, Pittenger, and Reed (1999) researched personality variables and various self-reported cheating practices during high school and college. One factor explored was the relationship between response bias and self-reported cheating. Thrope et al. (1999) expressed concerns about the use of self-reported cheating data due to possible response bias. As other researchers have noted, self-report data, especially regarding unethical practices, may result in minimized responses (Crowne & Marlowe, 1964; Paulhus, 2002). These results yielded a moderate negative relationship between cheating behavior
and social desirability. Thrope et al. dichotomized the data by educational level. The results were consistent with the earlier finding that individuals with greater need for approval (social desirability) reported lower levels of cheating in both high school and college.

As described earlier, Antion and Michael (1983) attempted to find a relationship between cheating behavior (i.e., cheating instances and cheating amounts) and factors including, but not limited to, social desirability. They sampled 148 college students in an introductory psychology course. Their results did not yield significant results regarding social desirability (Antion & Michael, 1983).

The present study will explore the relationships between academic integrity and the five factors of personality (neuroticism, extraversion, openness, agreeableness, conscientiousness) an individual’s self esteem, anxiety, depression, locus of control, self control, and social desirability. The author believes that academic integrity will have a positive relationship with conscientiousness, agreeableness, openness, self-esteem, depression, internal locus of control, and self-control. Academic integrity is believed to have a negative relationship to neuroticism, extroversion anxiety, external locus of control, and social desirability.
Chapter 2

METHOD

Participants

Two hundred and ten participants from lower division psychology classes at California State University, Sacramento participated in this study. Each Participant was awarded one hour of credit for their participation. Generally, from previous research conducted at California State University, Sacramento the population that participates in research is primarily female, young adults (between 18-21 years old), Caucasian, and single. Of the 210 participants, 49 were men (23%) and 161 were woman (77%). The mean age of participants was 20.86 (range 16 - 55) with a standard deviation of 3.93. The ethnicity of the sample was 12.4% Asian, 12.9% African American, 41.4% Caucasian, 13.3% Hispanic, 2.4% Native American, 5.2% Pacific Islander, 7.1% Multi-Racial, and 5.2% Other. The grade level of the participants was 31.9% Freshman, 21.9% Sophomores, 32.9% Juniors, 11.9% Seniors, and 1.4% Graduate Students. Two hundred participants reported their grade point average with a mean of 3.09 and a standard deviation of .475. Table 1 contains descriptive statistics for all demographic information collected.

Materials

Demographics

Demographics were assessed with use of a demographics form that provided participants with directions for the testing procedure and asked them to report their
Table 1

*Demographic Characteristics of Participants (N = 210)*

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<tr>
<td>Primary Others</td>
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<td>67.1</td>
</tr>
</tbody>
</table>
current age, gender, academic class standing, and GPA. The form also asked participants to indicate if they are a member of a fraternity, sorority, or honor society. Lastly the form asked participants to indicate their employment status, their living situation (on or off campus), and how their education is being financed (self, parents/others, loan, grant).

Academic Integrity Assessment (AIA)

Academic dishonesty was assessed by the Academic Integrity Assessment developed by McCabe for the Center for Academic Integrity and funded through the John Templeton Foundation (Center for Academic Integrity [CAI], 1992). Through personal correspondence with the author, permission was granted for use in this thesis. This scale consists of three likert-type sub-scales. The sub-scales addresses the academic environment (30 items), specific behaviors related to dishonesty (26 items), and perceived seriousness of academic dishonesty (26 items). This study will utilize the sub-scales related to dishonest behavior (i.e., Academic Dishonesty) and perceived seriousness of cheating (i.e., Seriousness of Cheating).

The Academic Dishonesty subscale consists of 26 items (range 0-52) with higher scores indicating greater levels of Academic Dishonesty. This sub-scale requests participants to indicate how often they have engaged in specific cheating activities. Participants were able to indicate if a specific behavior did not apply to their experiences. The Seriousness of Cheating sub-scale consists of the same 26 items (range 26-104). Here participants base the rating on how serious they perceive the behavior to be. Higher scores indicate greater perception of seriousness. Portions of this scale have been omitted due to redundancy (i.e., demographics and a free response area used for
comments). A further modification was made to “Academic Environment - Item 7” to correct for a missing center marker. This subscale was changed from the original four options “very unlikely, unlikely, likely, very likely” to very unlikely, unlikely, not sure, likely, very likely”. Cronbach’s alpha coefficient is reported at .80 (McCabe, personal communication, April 4, 2006).

**NEO-FFI**

The NEO-FFI is considered a short version of the NEO-PI. The brief 60 item assessment provides a comprehensive measure of the five domains of personality. These 60 items are broken into five 12 item sub-scales that measure each domain (neuroticism, extraversion, openness, agreeableness, and conscientiousness; Costa & McCrae, 1992). Higher scores indicate higher levels of each domain of personality. The measure has been found to have high internal consistency with a range of .68 to .86. The reliability coefficients for neuroticism, extraversion, openness, agreeableness, and conscientiousness are .79, .79, .80, .75, .83, respectively (Costa & McCrae, 1992).

**Coopersmith Self-Esteem Inventory**

The Coopersmith (1967) Self-Esteem Inventory is used to assess self-esteem. Self-Esteem as described by Coopersmith (1967) indicates the degree to which an individual believes that they are capable, significant, and successful. The inventory consists of 25 statements to be endorsed as “like me” or “unlike me”. Higher scores indicate higher levels of self-esteem. The Kuder-Richardson internal consistency coefficient range is .87 to .92. Test re-test reliability coefficients ranged between .72 to
.85 which was considered high for a two-month period (Chiu, 1985). Ahmed, Valliant, and Swindle (1985) found a Cronbach-alpha coefficient of .75.

State Trait Anxiety Inventory (STAI)

The next scale is the State Trait Anxiety Inventory, or the STAI. The test was developed by Spielberger, Gorsuch, Vagg, and Jacobs in 1983. This inventory assesses both current anxiety (state) and long term or stable anxiety (trait). The test contains 40 items on a four-point rating scale, 1 being “Almost never” and 4 indicating “Almost always” (Spielberger et al., 1983). Twenty of these items assess state anxiety (how one feels now) while the remaining 20 items assessing trait anxiety (how one feels generally). Higher scores indicate higher state and trait anxiety. Test-retest reliability for state anxiety ranged from .16 (females) to .33 (males); Test-retest reliability for trait anxiety ranged from .76 (females) to .84 (males) (Dreger, 1978). The normative sample revealed a coefficient alpha reliability range of .83 to .92 for state and .86 to .92 for trait (Dreger, 1978).

Beck Depression Inventory Second Edition (BDI-II)

The second edition of the Beck Depression Inventory is a revised and modernized version of the original (Beck, Steer, & Brown, 1996). This version was designed to assess depressive symptoms in relation to the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition (Beck et al., 1996). The inventory consists of 21 items rated on a 4 point scale with higher scores indicating greater depression. The coefficient alphas ranged from .92 to .93 for out patient and college students respectively. Test-retest correlations were found
to be significant (.93) (Beck et al., 1996). Due to the content within this scale and research suggesting possible negative participant reactions following completion of the scale, extra care was used within the debriefing. Participants were provided with referrals for Psychological Counseling Services should they have felt that the questionnaire evoked any painful memories or negative emotional responses.

*Internal Control Index*

Dutweiler (1984) developed the Internal Control Index to measure the extent to which a person feels they have control over his or her own life. This concept involves the belief that life outcomes are contingent upon a person’s own behavior (Rotter, 1966). The index consists of 28 statements (range 28-140) with higher scores representing greater internal locus of control (Dutweiler, 1984). Dutweiler (1984) research reports good internal reliability with a Cronbach-alpha of .84.

*CPI Self-Control subscale*

The California Personality Inventory is a 434 item personality inventory based on commonsense terms which Gough (1996) refers to as folk concepts. Overall median reliability for the individual scales is .68 (Gough, 1996). The present study used the Self-Control subscale (Sc) a 38 item true or false assessment which measures a person’s capacity to be goal oriented or self-directed (Groth-Marnat, 2003). Higher scores indicate more self control: “self-directed, inhibited, and withhold their expression of emotion and behavior” (Groth-Marnat, 2003, p.380). Those with lower scores are impulsive and have difficulty evaluating the consequences of their behavior. The
reliability coefficient for the Self Control subscale is .83 (Gough, 1996). Test re-test produced a reliability coefficient of .50 (Gough, 1996).

*Marlowe Crowne Social Desirability Scale (MCSD)*

The Marlow-Crowne Social Desirability Scale was originally published in 1960. The scale measures socially desirable responses. These responses represent a personality trait which was named “need for approval” (Leite & Beretvas, 2005). The scale consists of 33 true or false items with a range of 0-33 with higher scores indicating more socially desirable responses (Crowne & Marlowe, 1960; Paulhus, 1991). A Kuder-Richardson revealed an internal consistency coefficient of .88 and test re-test of .89 (Crowne & Marlowe, 1960).

**Procedure**

Introductory Psychology students voluntarily participated, for credit, by signing up for research via the Psychology Department research web site. The web site informed students about the requirements of each research project and allowed them to sign up for a specific day and time. When participants arrived, informed consent forms were handed out. All participants were asked to read the consent form and then sign and date it appropriately. The signed consent forms were placed in a sealed manila envelope to ensure anonymity and were stored in a separate location from the survey packets throughout the research process. Each participant then received a packet containing packet instructions, a demographics form followed by nine other questionnaires. The nine questionnaires were randomized for each participant to avoid order effects.
Participants were instructed to complete the enclosed questionnaires and to return them when completed. After a completed packet was turned in the packets were reviewed for completeness and participants were provided a debriefing scrip. Included in the debriefing scrip were specific instructions regarding the availability of Psychological Counseling Services for any participants who felt that the questionnaires evoked any painful memories or negative emotional responses. Participants were then issued 1 hour of credit for their participation. All participants were treated according to APA standards and ethical guidelines.
Chapter 3

RESULTS

The Pearson product-moment correlations for the variables used in this study are presented in Table 2. Academic Dishonesty reflects participants admitted cheating practices while Seriousness of Cheating reflects participant’s perception of the seriousness of cheating behaviors. As seen from Table 2 individuals who reported higher levels of Academic Dishonesty perceived cheating as less serious in nature. Furthermore, those with higher levels of Academic Dishonesty had higher levels of neuroticism and openness; they were also more anxious (state) and more depressed. The results also indicate that those with higher Academic Dishonesty have less self control. Finally, those with lower levels of Academic Dishonesty also reported more socially desirable responses.

A standard multiple regression was conducted with Academic Dishonesty as the dependent variable and the eight significant correlates as the independent variables. The eight variables were seriousness of cheating, NEO-Neuroticism, NEO-Openness, state anxiety, depression, locus of control, self control and social desirability.

Regression results are summarized in Table 3. The multiple $R^2$ for regression was statistically significant, $F(8, 184) = 5.401, p < .001, R^2 \text{ adj} = .155$. Three of the eleven independent variables contributed significantly to the prediction of Academic Dishonesty ($p < .001$). Higher levels of Openness and lower levels of the perception that cheating is serious (Seriousness of Cheating) and Self-Control predict greater Academic Dishonesty.
<table>
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<td>—</td>
<td>-.21**</td>
<td>.17*</td>
<td>.13</td>
<td>.18*</td>
<td>.04</td>
<td>.03</td>
<td>-.11</td>
<td>.16*</td>
<td>.10</td>
<td>.17*</td>
<td>-.25**</td>
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<td>.01</td>
<td>-.09</td>
<td>.09</td>
<td>.14*</td>
<td>.06</td>
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<td>.046</td>
<td>.19**</td>
<td>.07</td>
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<td>.00</td>
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<td>.52**</td>
<td>-.38**</td>
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</tr>
<tr>
<td>13. Self Control</td>
<td>—</td>
<td>.31**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Academic Dishonesty (N = 208); Seriousness of Cheating (N = 207); NEO- Neuroticism (N = 207); NEO- Extraversion (N = 208); NEO- Openness (N = 205); NEO- Agreeableness (N = 207); NEO- Conscientiousness (N = 205); Self Esteem (N = 209); State Anxiety (N = 209); Trait Anxiety (N = 206); Depression (N = 206); Locus of Control (N = 209); Self Control (N = 208); Social Desirability (N = 208).

*p < .05.; **p < .001.
Table 3

*Regression Analysis Summary for Personality Variables Predicting Academic Dishonesty*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>r</th>
<th>sr²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seriousness of Cheating</td>
<td>-.078</td>
<td>.030</td>
<td>-.182*</td>
<td>-.190</td>
<td>.030</td>
</tr>
<tr>
<td>NEO- Neuroticism</td>
<td>-.002</td>
<td>.116</td>
<td>-.002</td>
<td>-.002</td>
<td>.000</td>
</tr>
<tr>
<td>NEO- Openness</td>
<td>.213</td>
<td>.083</td>
<td>.175*</td>
<td>.187</td>
<td>.029</td>
</tr>
<tr>
<td>State Anxiety</td>
<td>.034</td>
<td>.047</td>
<td>.059</td>
<td>.053</td>
<td>.002</td>
</tr>
<tr>
<td>Depression</td>
<td>.056</td>
<td>.067</td>
<td>.071</td>
<td>.062</td>
<td>.003</td>
</tr>
<tr>
<td>Locus of Control</td>
<td>-.041</td>
<td>.044</td>
<td>-.079</td>
<td>-.069</td>
<td>.004</td>
</tr>
<tr>
<td>Self Control</td>
<td>-.303</td>
<td>.128</td>
<td>-.171*</td>
<td>-.173</td>
<td>.024</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>-.194</td>
<td>.103</td>
<td>-.148</td>
<td>-.138</td>
<td>.016</td>
</tr>
</tbody>
</table>

Note: $R^2 = .190$, adjusted $R^2 = .155$ (N = 193, p < .001). $sr^2$ = Squared semi-partial correlation.

*p < .05.*
The NEO-Neuroticism, State Anxiety, Depression, Locus of Control, and Social Desirability were not statistically significant in the prediction of Academic Dishonesty ($p > .05$).

An ANOVA was conducted on each demographic variable as the independent variable with Academic Dishonesty as the dependent variable. None except gender yielded significant results. Gender significantly affected Academic Dishonesty, $F(1, 176) = 7.21, p < .05, \eta^2 = .019$. Males were found to report higher levels of Academic Dishonesty ($M = 9.44, SD = 8.65$) as compared to females ($M = 6.25, SD = 5.95$). The value of Cohen’s $d$ was .43; this indicates a borderline medium effect size.
Chapter 4

DISCUSSION

When considering the nature of the topic studied here, it is important to remember that the majority of students have cheated during their college career (“Center for Academic Integrity,” 1999; Davis, Noble, Zak, & Dreyer, 1994; McCabe & Travino, 1993). Previous research estimates that between 70% and 90% of students have cheated at least once during college (“Center for Academic Integrity,” 1999; Davis, Noble, Zak, & Dreyer, 1994; McCabe & Travino, 1993; Sims, 1995). This study found that 86% of participants admitted to cheating at least once within the past year. This percentage is high given the fact that cheating behaviors are often under-reported by students (Crowne & Marlowe, 1964; Paulhus, 2002). This study may have found a higher cheating rate due to the fact that the Academic Integrity Assessment provides participants with 26 different forms of cheating to rate.

Overall, the present study found that Academic Dishonesty was related to many of the personality variables examined here. In fact, this study found that those who reported higher levels of Academic Dishonesty also had higher levels of neuroticism and openness. These results confirmed Karim, Zamzuri, and Nor’s (2009) results indicating that those with higher neuroticism scores were more likely to engage in plagiarism. The present findings also relate to those of Chamorro-Premuzic and Furnham (2003) who found neuroticism to be a negative correlate and predictor to academic achievement. Thus, students who have difficulty achieving in school may be looking for alternative methods for achievement.
Craciun’s (2007) research examined positive and negative mood states and their effect on cheating behavior. Craciun’s (2007) results were opposite to those results found here. Cracium (2007) found that those in positive mood states cheated more than those in negative mood states. Craciun (2007) admits that her results are “contrary to popular wisdom” (p. 46). The results found in this study indicate that those with higher levels of depression also reported higher levels of cheating behavior. These results are more consistent in relation to the symptoms of depression, which could lead to a greater need to engage in cheating behaviors (i.e., concentration, cognitive difficulties, sleep disturbances, and anxiety).

Other significant results were related to the inverse relationship between Academic Dishonesty and social desirability. This study found that those who reported lower levels of cheating also reported a greater need for approval (social desirability). It is believed by this author that participants may have under-reported or minimized their cheating behaviors due to the sensitive nature of the topic and a need for approval. Previously researchers have expressed concerns regarding the accuracy of self-report data, especially regarding unethical practices (Crowne & Marlowe, 1964; Paulhus, 2002). Within the procedure of this study, steps were taken to ensure anonymity of its participants. However, given the consequences related to Academic Dishonesty it is possible that some participants under-reported or provided a socially desirable response.

This study also found significant results relating to the prediction of Academic Dishonesty. Higher levels of openness and lower levels of the perception that cheating is serious (Seriousness of Cheating) and self-control predict greater Academic Dishonesty.
Again, the results regarding openness have not been found in previous research. This result may be related to the population studied here (i.e., predominantly female psychology students). With regard to the results of predicting Academic Dishonesty by the perception that cheating is less serious, these may be explained by cognitive dissonance. Here, students may be attempting to justify or rationalize their behavior. In fact, McCabe (1992) found that students often rationalize their cheating behavior.

With regard to the overall results of this study in comparison to previous results, this sample was slightly different from others. Many of the previous studies have utilized results from multiple campuses and have used larger sample sizes (Ashton, 2001; Bolin, 2004; Davis, Grover, Becker, & McGregor, 1992; McCabe, 1992; McCabe & Travino, 1997). California State University, Sacramento is a commuter-based campus that lacks the volume of social clubs, activities, and on-campus life that are common at larger more traditional campuses. Results have shown increases in Academic Dishonesty in environments that have a larger student population, more on campus living, and group-based activities (McCabe & Travino, 1997; McCabe, Travino, & Butterfeild, 2001).

In summary, students who cheat frequently are more neurotic, open to experience, and depressed. Additionally, these students have more situational-based anxiety (state anxiety) and have a greater need for approval (social desirability). Cheaters also have less self-control and more apt to report rationalizations about their behavior (seriousness of cheating). Lastly, 4 out of 5 students have engaged in cheating despite indicating that they are aware of the consequences. Thus, students may believe that the benefits outweigh the consequences.
When considering previous research and the results found here about student cheating, it is clear that a number of aspects can contribute to this behavior. Indeed, cheating behavior is not the result of one dominant factor, but rather a concert of factors playing in harmony. In fact, openness to experience, anxiety, and self-control bring together strong factors related to divergent thinking, risk taking, impulsivity, and instant gratification. Further, these characteristics coupled with depression can lead individuals to make poor decisions based on a need to cope. Neuroticism is a personality characteristic described as a combination of neuroses, many of which are related to the above variables. Furthermore, this study suggests that individuals who cheat also believe that it is not serious, indicating the use of cognitive dissonance. This would indicate that students initially perceive cheating as wrong, but justify the behavior in order to preserve their self-worth. Therefore, it is believed that students who cheat are attempting to release internal tension and increase self-perceptions in a maladaptive manner.

Implications of this study could encourage university administrators to explore current policies and ethical guidelines within California State University, Sacramento (CSUS). This study found that 86% of participants cheated at least once in the last year and the same percentage (86%) admitted to being informed about current cheating polices at CSUS. Additionally, 55.9% of participants reported observing other students cheating at least once on tests or exams at CSUS. Furthermore, only .03% indicated that they had reported observations of cheating to CSUS officials. McCabe and Trevino (1993, 1997) have found that students who understand and believe in the honor codes cheat less. It appears that gross numbers of students are cheating and are observing other
students cheat even though they report awareness of campus policies. Thus, there may be a need to revisit and review the effectiveness of current policies and honor codes on campus. The “Center for Academic Integrity” (1999) has called for increased awareness among faculty and students about their institutions’ Academic Integrity policies in order to decrease cheating behaviors and increase ethics in education. Moreover, the “Center for Academic Integrity” (1999) reports that campuses with strong and practiced honor codes have noted decreased levels of Academic Dishonesty.

Future research should further examine personality variables in relation to Academic Dishonesty; specifically, the Five Factor Model and Depression. Aspects of these variables were found to be significant within this study and previous research was limited on these topics. Furthermore, this research found discrepancies with regard to the results for Depression. It also appears that research should focus on the exploration of interaction effects and mediating factors. Other areas to consider may be the motivation behind cheating behavior (i.e., grades vs. learning or letter grades vs. pass-fail system). Finally, this writer suggests a narrowing of research regarding the effectiveness of honor codes, campus cheating polices, and review boards to gain better information about effective strategies for the prevention and prosecution of cheating.
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