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**MORAL DISENGAGEMENT AND ACADEMIC CHEATING:
THE ROLE OF INDIVIDUAL DIFFERENCE AND SITUATIONAL VARIABLES**

by

VERONICA E. CAVA

**A dissertation submitted to the Graduate Faculty in Educational
Psychology in partial fulfillment of the requirements for the degree
of Doctor of Philosophy, The City University of New York**

2000

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Abstract

**MORAL DISENGAGEMENT AND ACADEMIC CHEATING:
THE ROLE OF INDIVIDUAL DIFFERENCE AND SITUATIONAL VARIABLES**

by

Veronica E. Cava

Adviser: Professor Barry Zimmerman

It has been observed in the student cheating literature that although nearly all students report holding beliefs that it is morally unacceptable to engage in cheating, a majority of these same students have engaged in cheating (Davis, Grover, Becker & McGregor, 1992). The present research sought to examine whether Bandura's (1990) notion of moral disengagement would be able to bridge the seeming gap between cheating beliefs and cheating behavior. Moral disengagement is defined as the process by which an individual proactively suspends his/her moral standards in an effort to reduce the self-censure that ordinarily accompanies conduct that violates one's moral code. The reduction of self-censure frees the individual to violate his/her moral code (i.e., cheating.)

The present research hypothesized that individuals who hold strong anti-cheating beliefs would also admit to cheating. Moral Disengagement would mediate the relationship between Cheating Beliefs and Self-reported Cheating. Students who relied more heavily on the use of Moral Disengagement were expected to report less guilt when they engage in cheating. Path analysis of the original research model supported each of these hypotheses.

Supplemental analyses examined eight background variables to determine their influence on students' cheating beliefs and their tendency to morally disengage in potential cheating situations.

Among these eight factors were four individual difference variables (i.e., Religiosity, Self-regulatory Efficacy to Resist Peer Influence to Cheat, Academic Self-efficacy, and Personal Academic Achievement Goals) and four situational variables (i.e., Parental Academic Achievement Goals, Peers' Cheating, Fear of Consequences [of cheating], and Exam Preparedness.)

It was found that students who were more religious were less likely to morally disengage. Students who had high Self-regulatory Efficacy to Resist Peer Influence to Cheat and who believed that their classmates rarely cheated also had strong beliefs that cheating is wrong, were less likely to morally disengage, and were less likely to report engaging in cheating. The belief that the consequences of cheating would be severe was associated with strong Anti-cheating Beliefs and the tendency to refrain from morally disengaging. Finally, students who generally felt less prepared for examinations were more likely to morally disengage.

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CHAPTER I

Introduction

Disengagement as a Factor in Educational Achievement

Not surprisingly, most students seem to have a sense that academic cheating is wrong. Davis, Grover, Becker and McGregor (1992) reported that over approximately four years and 6,000 college students, the percentage of students stating that it is wrong to cheat is never less than 90%. Yet, approximately 76% of these same students have reported engaging in cheating in either high school, college, or both. Aidala and Greenblat (1986) observed the same inconsistency between belief and action in their examination of moral judgments among students from the late 1920's to the early 1980's. They argue that traditionally disapproved behaviors such as stealing, cheating, accepting bribes, or having extramarital affairs are still consistently rated as morally wrong. However, this consistency of moral judgment over time has been accompanied by an increasing willingness to engage in these behaviors, despite beliefs that they are morally wrong. Finally, even in the classic study of cheating by Hartshorne and May (1930), the authors conclude that, "... Knowledge of the proper thing to do show[s] no relation with the doing of it...(p. 163)."

What phenomenon allows this seeming inconsistency between belief and behavior to operate on an almost universal basis? Specifically, what psychological processes allow an individual to endorse a moral standard of cheating as unpermissible and yet consistently engage in this very same behavior? If an individual tends to behave in a way that is

inconsistent with his/her stated beliefs, why not reject those beliefs in favor of ones that are consistent? Is there a way to bridge this seeming gap between belief and action?

Situational Factors in Moral Judgments

One possible source of the observed inconsistency between moral beliefs and moral behavior may stem from the type of model used to predict moral behavior. Specifically, most traditional approaches to this question use models that contain an underlying assumption of a single stage model. Single stage models operate under the assumption that individuals endorse general moral principles, and that there is a one-to-one correspondence between beliefs and behavior. Examples of such general moral principles are as follows:

- "It is good to help those who are less fortunate than oneself."
- "It is important to respect the rights of others."
- "It is wrong to (knowingly) spread untruths about others."
- "It is wrong to cheat on tests at school."

Single stage models treat these principles as universal and context-free in their application.

With single stage models, it is common to measure an individual's endorsement of a particular set of moral principles and then attempt to predict cheating behavior (e.g., Davis et al., 1992; Aidala & Greenblat, 1986). The difficulties with single stage, universalistic models are well known: they fail to account for situational variation in behavior. Even in everyday activity (e.g., parents disciplining their children, justice administered within the legal system), it is widely recognized that no general principle works all the time or in all situations. Every principle is defined, to some degree, by circumstances. Thus, "Thou shalt not kill" may be rendered "Thou may kill in self-defense."

Figure 1: Single stage Model of Moral Behavior.

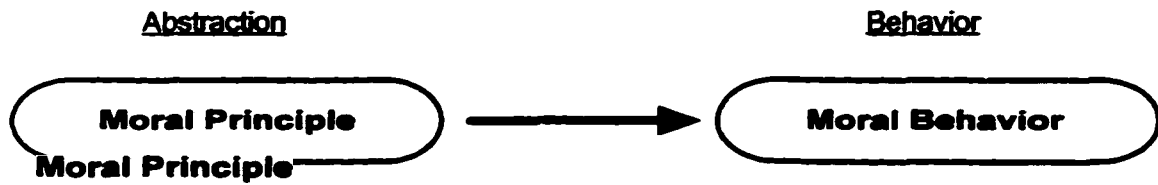


Figure 1 shows a general single stage model of moral behavior. If this model is applied to cheating, it would hypothesize that cheating beliefs are expected to directly predict cheating behavior. Thus, those endorsing the unacceptability of cheating are expected to refrain from cheating, while those who do not believe that cheating is wrong would be expected to cheat. As can be seen from the Davis et al. (1992) and the Aidala and Greenblat (1986) studies, the overwhelming majority of students express the belief that cheating is wrong. Contrary to the prediction that would be made with a single stage model, substantial numbers of these same students engage in cheating behavior. This inconsistency highlights the inadequacy of single stage models.

This same inconsistency between beliefs and behavior would be present if Kohlberg's model of moral reasoning were applied to the prediction of cheating behavior. Kohlberg's model seeks to enumerate the criteria by which behavior is judged to be morally acceptable or unacceptable. The sequence of the stages in his model is thought to be consistent over individuals, and within a given stage, the criteria for judging behavior are thought to be consistent over context. For example, for individuals in the stage of Social System and Conscience (stage 4), the primary concern is with maintaining the existing social order, which includes obeying legitimate authority, upholding the law, and meeting one's duties to society (Colby & Kohlberg, 1987). The common property of moral judgments within all stages of Kohlberg's model is that within a given stage of moral reasoning, the same criteria are hypothesized to be used in all contexts. Thus, for individuals in the stage of Social System and

Conscience, the reasoning for avoiding any deviant behavior (e.g., cheating, lying, being selfish) is the same: it is damaging to the social order.

Situational variation in behavior is not addressed by this model. Kohlberg's failure to address situational specificity in behavior allows his model to be conceptualized as a "single stage" because it would hypothesize a direct relationship between level of moral reasoning and moral behavior. Since one's moral beliefs are not applied to concrete behavioral situations in a context-free manner, the mere knowledge of one's cognitive competency for morality (Mischel & Mischel, 1975) is not sufficient to predict behavior. If, as in the present research, one is interested in the prediction of actual (cheating) behavior, Kohlberg's failure to consider the situational variation in applicability of moral principles limits the utility of his model for this purpose.

Given the relatively poor ability to predict cheating using traditional single stage models, a dual stage model was proposed for the purposes of the current research. This dual stage model proposes a hypothetical construct, "moral disengagement," as a mediating process in the relationship between cheating beliefs and cheating behavior. Moral disengagement is proposed as a potential mediating process based upon the work of Bandura (e.g., 1999, 1991).

Bandura's notion of moral disengagement was formulated within a Social Cognitive framework. Social Cognitive Theory views all behavior, including moral behavior, as interpreted through and subsequently modified by a three-part self-regulatory system (Bandura, 1978). Within this self-regulatory system, behavior is first observed by the self (self-observation). It is then evaluated according to various internal and external standards (self-judgment) that have been developed through a history of social interaction (Bandura, 1978). The final component of this self-regulatory loop is self-reaction, whereby one's future behavior

is likely to be contingent upon the self-judgments made in the second phase of the system. Favorable judgments of behavior will give rise to positive self-reactions, while unfavorable judgments will invoke negative self-reactions. Self-reactions, then, will take the form of either self-reinforcement or self-censure. Self-reinforcement is likely to perpetuate a behavior, while self-censure is likely to lead to a behavior's discontinuance.

A negative self-reaction, or self-censure, is ordinarily expected when one violates one's moral standards. However, it is Bandura's contention that self-censure can be avoided, even in the face of behavior that has violated one's personal standards of moral conduct. He maintains that personal standards can be selectively activated or deactivated (Bandura, 1996a). Engagement of one's moral code, or *allowing* oneself to be subject to self-censure following violation of one's personal standards of moral behavior is thought to be an active process. When the choice is made to avoid self-censure and set aside or disengage personal moral standards, it is referred to by Bandura as "moral disengagement" (Bandura, 1990; Bandura, 1991).

Figure 2: Social Cognitive Theory: The Self-regulatory Process



Figure 2 shows the self-regulatory feedback loop hypothesized by Social Cognitive theorists to manage all behavior. According to this conceptualization of behavior, cheating behavior may be observed in the self. The self then evaluates and reacts to this behavior. It is

during the self-judgment process that moral disengagement would occur. When an individual has opted to morally disengage his/her standards, the self-reaction process should not produce self-censure or guilt, since the purpose of disengaging one's morals standards is to escape self-condemnation.

Figure 3: Dual Stage Model of Moral Behavior.

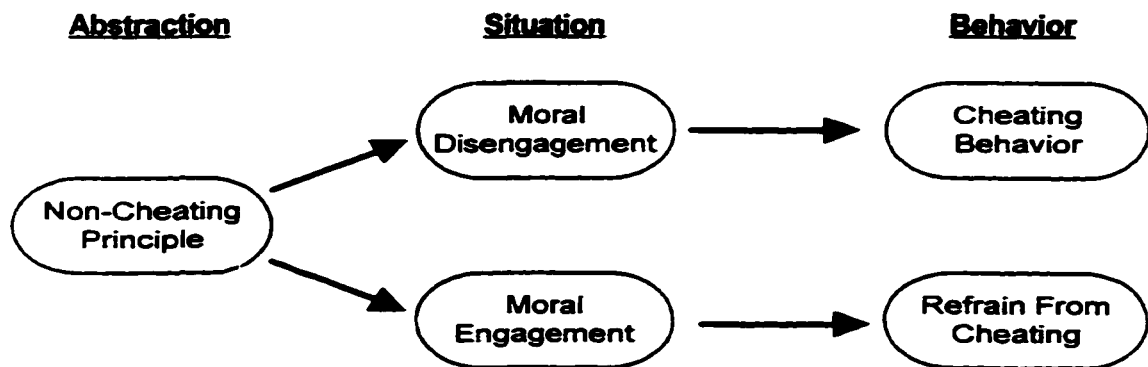
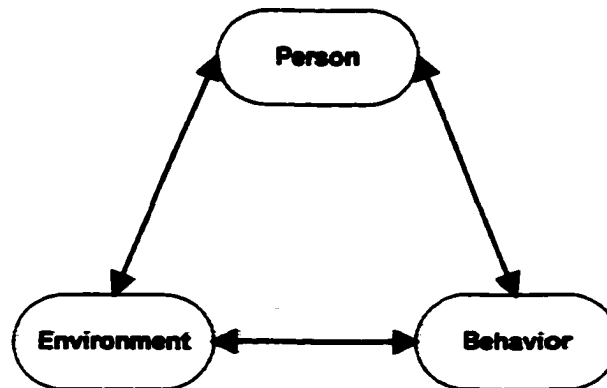


Figure 3 shows a dual stage model of cheating. Instead of proposing a direct relationship between anti-cheating principles and the decision to refrain from cheating as in a single stage model, this dual stage model shows moral disengagement as an intervening “stage” in the relationship between cheating principles and cheating behavior. It is important to note that the model assumes that individuals hold moral principles that are inconsistent with cheating. (Any predictions made from this model are applicable only to such individuals.) According to the model, individuals holding anti-cheating beliefs will either choose to activate (engage) or deactivate (disengage) their anti-cheating beliefs in the first stage. In the second stage, individuals who disengage their moral standards are predicted to be more likely to engage in cheating; those who do not, are expected to refrain from cheating.

Figure 4: Social Cognitive Theory: Factors Influencing Behavior

The proposed dual stage model is highly consistent with Social Cognitive Theory in that this theoretical orientation places heavy emphasis on situational factors. Social Cognitive Theory is unique in that equal weight is given to personal, environmental, and behavioral factors as determinants of human functioning. Figure 4 shows the reciprocal relationships among these three factors, as proposed by Bandura (1991). Within the context of the present research, the “Person” element may refer to personal beliefs, such as beliefs about cheating. These beliefs are expected to interact with environmental factors (e.g., preparedness for an examination, test difficulty, probability of being caught in an act of cheating) to produce behavior (i.e., either academically honest or dishonest). Moral disengagement can be conceived of as the interaction between *Environment* and *Behavior*. Thus, moral rules are not viewed as transcendent; they are controlled by situational influences. Situational factors determine the meaning of a moral principle, and behavior is modified accordingly.

Moral Disengagement Strategies

Bandura (1990) describes eight strategies of moral disengagement. Table 1 provides a brief overview of these disengagement strategies. One group of moral disengagement

Table 1: Moral Disengagement Strategies

| Type of Cognitive Distortion | Moral Disengagement Strategy | Brief Description of Strategy |
|---|---|---|
| I. Alteration of self-perceptions associated with behavior that violates one's moral code (i.e., morally objectionable behavior) | a. Ascribe moral purposes to morally objectionable behavior | Cognitively reconstrue morally objectionable behavior in terms of laudable, worthy goals |
| | b. Euphemistic labeling of morally objectionable behavior | Refer to the objectionable behavior using terms that have morally positive connotations (e.g., firing a diligent, competent employee may be referred to as "right-sizing" the organization.) |
| | c. Advantageous comparison | Contrast morally objectionable behavior to an even more objectionable action so that the original behavior is perceived as more benign by comparison. |
| II. Alteration of one's perceptions of personal responsibility for morally objectionable behavior | a. Displacement of responsibility for morally objectionable behavior | Cognitively transfer responsibility for morally objectionable behavior from the self to an authority figure |
| | b. Diffusion of responsibility for morally objectionable behavior | Engage in morally objectionable behavior with others so that blame can be cast upon the others ("They did it, too!"). Alternatively, complete only a segment of an entire misdeed while others complete the remaining segments so that no one individual is responsible for the act as a whole. |
| III. Denial of the consequences of one's morally objectionable behavior. | a. Distort, minimize, deny, or ignore negative outcomes that result from one's behavior. | Morally objectionable acts are viewed as having minimal impact on the victim or are viewed as "victimless crimes." |

| Type of Cognitive Distortion | Moral Disengagement Strategy | Brief Description of Strategy |
|---|----------------------------------|--|
| IV. Alteration of one's perceptions of the victims of morally objectionable acts. | a. Dehumanization | Perceive the victims of deviant acts as less than human and thus, less deserving of the respectful treatment customarily afforded to others. |
| | b. Casting blame upon the victim | Blame the victim for making one's morally objectionable behavior necessary. |

strategies involves cognitively reframing one's objectionable behavior so that one is able to construe it in a moral light. It is in this way that people then "can act on a moral imperative (Bandura, 1990; p. 29)." Bandura discusses three strategies for altering the self-perception's associated with one's objectionable behavior. The first strategy is referred to as moral justification, whereby moral purposes are ascribed to behavior for which one would normally expect self-condemnation. Bandura (1990) provides a military example of this strategy in which he discusses the common perception of killing as deplorable. Yet, he states, soldiers are able to morally justify killing in combat because they may cognitively reconstrue it as serving worthy or just purposes, such as pursuing freedom from oppressors, protecting democracy, preserving peace, or any other number of admirable goals. This strategy may also take the form of "protecting one's honor" or "reputation" (Bandura, 1996a).

Euphemistic labeling is a second cognitive strategy based upon altering the perceptions of one's questionable behavior. This strategy is effective in reducing or eliminating

self-sanctions because it is one way to relieve the sense of personal agency that an individual would otherwise have if s/he were to violate his/her personal code of conduct (Bandura, 1990).

For example, he refers to the tendency to speak not of people being fired, but rather of them being "selected out," implying that this selection is something to be sought after. Bandura discusses the transformation of "fulfilling a contract" from something evil (i.e., murder) to something laudable, the faithful performance of duty.

Advantageous comparison is a third strategy for restructuring the perceptions of behavior to make them more cognitively acceptable. This strategy functions by contrasting an objectionable act with an even more objectionable one. The perception of the first contrasted event is influenced by the perception and evaluation of the second (Bandura, 1990). A statement of advantageous comparison may take the form of, "I know that it's not right to take office supplies from work, but at least I don't take money." Or, one might be prompted to say, "I know I should visit my elderly parents once in a while, but at least I take care of their financial needs." In both cases, guilt is expected to be lessened by the knowledge that although one's behavior is less than desirable, there are worse things that one could do.

Bandura (1990) conceptualizes a second group of strategies of moral disengagement that are designed to alter self-perceived responsibility for action, or to obscure personal agency, in the language of Bandura. One such strategy is displacement of responsibility, whereby perceived responsibility for objectionable or deviant conduct is (cognitively) transferred from the self to an authority figure. Perceptions of personal control over one's actions are least likely when there is a high degree of consensus regarding the morality of a given behavior, when an authority perceived to be legitimate (e.g., one's commanding officer in the military, a religious/cult authority figure) sanctions that action, or when the consequences of an action are perceived to be unintended or unforeseeable (Bandura, 1990). Bandura notes

that with higher rank or greater perceived legitimacy of authority, it is less likely that commands for objectionable acts will be disregarded.

He is careful to note, however, that this phenomenon is not an example of mindless obedience. On the contrary, the decision to engage in behavior that runs counter to one's moral standards is a reasoned one. Bandura states that the decision to violate one's moral code at the request of another (i.e., a "legitimate" authority) depends largely upon a strong sense of responsibility to "being a good functionary (p. 36)." Such individuals are concerned with being faithful to the discharge of their duty as well with the actual consequences of their actions. Therefore, Bandura (1990) conceives of two levels of responsibility: accountability to one's superiors and accountability for one's actions themselves.

A second strategy for obscuring personal agency, and thus lessening the threat of self-sanction, is the diffusion of responsibility. Responsibility is diffused when many people are needed to complete a misdeed. In other words, no one person is responsible for the entire act in question, but rather, each person completes a part of the whole misdeed. Group participation in objectionable behaviors is also another method of reducing self-sanctions because the participation of others in the questionable activity allows one to cast blame on them rather than on the self. Personal responsibility is lessened because others are also engaging in the same act.

Bandura (1990) discusses a third group of moral disengagement strategies, those that affect the perceived consequences of objectionable behavior. These strategies allow one to downplay, misrepresent, deny, or ignore the negative consequences of one's deviant behavior. Cognitive distortions of the consequences of one's deviant behavior may induce a statement such as, "Well, sure I cheated on my taxes, but it doesn't matter.... The government has enough money!" or "Yes, I cheated on my wife, but what's the harm? She'll never find out."

These strategies are effective in the reduction of self-condemnation because in the absence of a victim or any negative consequences, there is no need for self-censure.

A final type of moral disengagement strategy involves the perception of the victims of deviant acts. Dehumanization is a strategy that is effective because there is less guilt associated with aggression committed against those who are perceived as less than human. Dehumanization of the victim is a common military technique that allows soldiers to kill their perceived enemy (Bandura, 1990). Another technique involves casting blame upon the victim.

It is possible to use multiple strategies of moral disengagement simultaneously. Bandura (1991) contends that as the number of moral disengagement strategies used in a given situation increases, the effects on behavior are multiplicative rather than additive. With the use of greater numbers of strategies of moral disengagement, the likelihood of self-censure is drastically reduced, thus increasing the probability of engaging in deviant behavior. Conversely, proactive and simultaneous use of a number of strategies to facilitate moral engagement (e.g., personal acceptance of responsibility, viewing potential victims as similar to oneself, or making an active effort to assess the potential negative consequences of a given behavior) is thought to be a stronger deterrent of deviant behavior (Bandura, 1978).

It is important to recognize that moral disengagement is a gradual process in which self-sanctions are weakened over time and repeated performance of a once-objectionable behavior (Bandura, 1990). The process begins with encouragement to perform a questionable act that results in only slight self-condemnation. With repeated performance of the behavior and repeated reliance on strategies of moral disengagement, the degree of self-censure decreases and the degree of comfort with the behavior increases. As such, there is an escalation of tolerance for deviant behavior.

Overall, the strategies of moral disengagement fall into three broad categories. These strategies are attempts to alter one's perceptions of the morally unacceptable behavior itself, perceptions of one's responsibility for that behavior, or perceptions of the consequences of one's unacceptable behavior. In all three cases, however, the key feature of the proposed dual stage model is that moral disengagement allows the prediction of situations in which behavior is not expected to "follow the rules" (i.e., conform to moral principles).

Moral Disengagement and its Applicability Across Contexts

Bandura has applied his moral disengagement construct to a number of contexts. One such context has been the commission of aggressive acts such as those committed in military combat, terrorist activity, or sexual assault. The tendency to rely on the use of strategies of moral disengagement has also been examined within an educational context (e.g., Bandura, 1996b) although it has not been directly applied to cheating to date. The application of moral disengagement to the domain of academic cheating would be an ideal extension of this construct because moral disengagement was intended to account for observed inconsistencies between moral beliefs and moral behavior. Moral disengagement is hypothesized by Bandura (1990) to predict the situations in which behavior is not expected to follow one's professed moral principles. By extension, cheating is a good candidate for a moral disengagement model, as the literature has shown that cheating is subject to situational variation. For example, students are more likely to cheat when they believe that other students are cheating or in cases of inadequate teacher monitoring of examinations (e.g., Genereux & McLeod, 1995). In the case of students believing that others are cheating, Bandura's strategy of *euphemistic labeling* may manifest itself when students cognitively reconceptualize their cheating as "just leveling the playing field" or "making things *fair*." In a situation where students perceive teacher monitoring of an examination to be inadequate, the strategy of *casting blame*

upon the victim make take the form of "Well, it really doesn't matter too much if I cheat... If the teacher didn't want me to cheat, *she* should have watched over the class better." A moral disengagement model would aid in the reliable prediction of cheating in a variety of contexts.

Bandura's work on moral disengagement can further develop the Social Cognitive perspective on student cheating. Much of what he hypothesizes about aggression can be applied to cheating, which can be conceived of as a type of aggression. According to this perspective, cheating would be attractive because of the anticipated rewards, among which are social approval and status (Bandura, 1978). Similarly, violation of one's moral code to refrain from acts of cheating ordinarily would lead to self-reprimand. It is through self-condemnation that cheating is thought to be deterred.

According to Social Cognitive Theory, students should not be expected to cheat in the presence of other means of achieving their desired goal, be that social status, good grades, or another type of reward. Individuals are also expected to be less likely to engage in deviant behavior (e.g., cheat) if severe, negative consequences are anticipated for participating in that deviant behavior (Bandura, 1978).

Rationale

The purposes of the present research were as follows. The first goal was to provide further evidence of the validity of a research scale specifically designed to assess students' inclination to use strategies of moral disengagement in situations involving potential academic dishonesty. This scale was originally developed in the course of a prior pilot study because no adequate measure currently exists within the literature. The procedure for its development will be reported below.

A second goal was to replicate the findings of the same pilot study in which moral disengagement was found to be a reliable predictor of self-reported cheating in junior high

school students. **Religiosity and Perceived Cheating by Classmates**, in turn, were found to be reliable predictors of moral disengagement. **Religiosity** was chosen in the initial pilot study as a potential predictor of moral engagement because it was hypothesized that those who were more religiously inclined would be less likely to suspend their moral standards, particularly since these individuals were hypothesized to have a moral code that is more personally salient and thus more likely to be activated in the course of daily activity. Additionally, given the finding by Bandura (1996b) that a prosocial orientation is negatively related to moral disengagement, religiosity was selected as one aspect of a prosocial orientation with the expectation that religiosity would show similar patterns of relationship to moral disengagement. **Perceived Cheating by Classmates** was selected in the original pilot research because personal cheating has been found to be directly related to perceived social support for cheating (e.g., McCabe & Trevino, 1993; Bandura, 1996b).

A third goal of the present investigation also arose from the cited pilot study. One of the conclusions of that study was that further investigation would be warranted to determine whether other reliable predictors of moral disengagement could be found in addition to **Religiosity and Perceived Cheating by Classmates**. In other words, it was necessary to determine whether there were other factors that encourage moral disengagement in potential cheating situations. Survey of the literature indicates that a number of situational and individual difference variables are reliable predictors of cheating. The goal of the present research was to select key individual difference and situational variables and to assess the ability of these variables to predict the use of moral disengagement strategies, and in turn, self-reported cheating behavior.

The present research seeks to integrate two broad areas of investigation: the literature on moral disengagement and its relationship to deviant behavior and the literature on individual

difference and situational variables as predictors of academic dishonesty. The proposed model tests several variables for their contribution to moral disengagement and subsequent cheating. The reasoning behind the choice of the specific variables included in the model as predictors of moral disengagement and academic dishonesty will become clearer after a review of the recent cheating literature. As such, the eight specific predictors included in the model will be presented with the proposed model at the conclusion of Chapter II.

The model also tests Bandura's assertion that the use of moral disengagement strategies is expected to produce a reduction in guilt. Therefore, an estimation of predicted guilt following an act of cheating is included in the proposed model.

Finally, the dependent variable in the model was academic achievement, which was conceptualized in terms of self-reported report card grades. Academic achievement was included in the model in order to determine whether self-reported cheating, as potentially influenced by moral disengagement, influences good and poor students in a similar way.

Overall, then, the present research sought to extend Social Cognitive Theory to the area of academic dishonesty. Further, it was designed to test whether a dual process model including moral disengagement is able to account for a greater amount of variance in cheating behavior than a single process model (i.e., one that does not include moral disengagement). The model also addresses the issue of situational variation in moral disengagement itself. The tendency to morally disengage was initially hypothesized to be influenced by the situational influences of modeling, self-efficacy, and reinforcement; additional influences on the tendency to morally disengage are also examined based upon findings from the literature. Knowledge of individual differences in the tendency to morally disengage is important to the prediction of cheating behavior because this knowledge allows for specific conditions under which one's behavior will and will not mirror his/her moral beliefs.

Chapter II

Literature Review

At present, the area of academic dishonesty continues to provoke much research in both the psychological and educational literatures. Within these literatures, there is an abundance of functionally driven work, but theoretically driven research is more scarce. The present research is valuable in this regard because it seeks to add to the body of theoretical work on cheating. Specifically, it attempts to develop a model of cheating from within a Social Cognitive framework.

Review of the recent cheating literature will be broken into five main sections. The first section examines the recent theoretical literature on deviant behavior. Emphasis is given to the Social Cognitive and related views of deviance. The second section will specifically address the recent Social Cognitive and related work on cheating itself. The third section contains a review of the more functionally driven cheating literature. As a whole, this body of work tends to assess the relationship of academic dishonesty to a collection of individual difference and/or situational variables; these variables are often chosen for their "face validity." The fourth section contains a discussion of methodological concerns within the literature and how they affect the present research. The final section of Chapter II presents an elaboration of the proposed research model.

Theoretical Perspectives on Deviance

The first main area of emphasis in this literature review considers Social Cognitive and related theories of deviance. "Related theories" refers to theoretical perspectives that are consistent with Social Cognitive Theory, even if they are not specifically designated as such.

Social Cognitive and Related Approaches to Moral/Deviant Behavior

Mischel and Mischel (1975) provide a concise description of the Social Cognitive view of moral behavior. They focus on the contrast between an individual's "cognitive capacity to generate moral (prosocial) behaviors (p. 2)" and his/her enactment of these behaviors in concrete situations. This contrast reflects the difference between moral judgment/competence and moral behavior. Moral competence is not necessarily expected to mirrored in behavior. Mischel and Mischel hypothesize that the link between moral competence and moral behavior is the expected consequences of each behavioral alternative in a specific context. They state that one's personal behavior-outcome expectancies influence the ultimate selection of a single behavior from the many possible behaviors that one *could* select in a given situation. These behavior-outcome expectancies are developed through personal experience in similar situations or they may be developed vicariously. The authors point out that "even the noblest altruism supported by the 'highest' levels of moral reasoning still depends on expected consequences...(p. 6)." They hypothesize that the issue of predicting moral behavior is made even more complicated by differences in the subjective value of the expected outcome (i.e., how personally important the outcome of a situation is) and by individual differences in the tolerance for deviations from conventional moral norms.

According to Mischel and Mischel (1975), anticipated internal consequences can be as important as anticipated external consequences in determining (moral) behavior. Individuals set moral goals for themselves in each situation. Meeting the established goals is expected to lead to self-reinforcement, but failure to meet those goals is expected to produce self-condemnation. Even when one's moral goals are not met, the authors suggest that self-condemnation can be avoided by a "wide variety of self-deceptive mechanisms (p. 13)," which Bandura (1999) would call "moral disengagement."

As a relatively new construct within the psychological literature, moral disengagement has received somewhat limited attention to date. One study by Bandura (1996b) addresses moral disengagement in relation to delinquent and general "problem behavior." In this study, academic efficacy and personal academic aspirations were negatively associated with a tendency to morally disengage and with the frequency of participation in problem behaviors (i.e., hyperactivity, aggressiveness, inattentiveness, transgressive conduct, anxiety and withdrawal, somatic complaints, and obsessiveness). Academic efficacy and personal academic aspirations were also positively associated with academic achievement. Academic efficacy was defined by Bandura as the perception of control over one's learning and mastery of academic subject matter and the perception that one's own academic performance expectations, as well as those of parents and teachers, are able to be met. Transgressive behavior was defined as conduct that is physically injurious, destructive, verbally abusive, or deceptive; theft was also included in this type of behavior. Academic aspirations were defined in terms of the level of schooling students expected to complete. Academic efficacy was found to directly and indirectly affect achievement. The indirect influence on achievement stems from the role of academic efficacy in raising academic aspirations, facilitating positive peer social relationships, preventing despondency, and decreasing the tendency of students to use strategies of moral disengagement with respect to engaging in problem behavior.

Perceived self-regulatory efficacy to resist temptation to engage in high-risk activities was found to positively influence achievement directly as well as indirectly by counteracting students' inclinations to morally disengage and to participate in problem behaviors (Bandura, 1996b). Self-regulatory efficacy to resist the temptation to engage in high-risk activities was operationalized as the perception of one's ability to refrain from alcohol/drug use, unprotected sexual activity, and transgressive behavior.

Prosocial orientation also had both a direct and indirect impact on achievement (Bandura, 1996b). It influenced achievement by facilitating positive peer social relationships, buffering tendencies toward depression, and by discouraging moral disengagement and problem behavior. Four aspects of prosocial behavior were assessed: kindness, helpfulness, cooperativeness, and sharing.

Bandura (1996b) also reports that student popularity (i.e., positive peer regard) appears to make the use of moral exonerations more likely in situations that potentially involve transgressive behaviors. Bandura is quick to note that both the size and direction of the relationship between peer regard is contingent upon the type of peers in question. Rejection by prosocial peers may lead to acceptance (and thus positive peer regard) by deviant peers (Bandura, 1996b).

Use of moral disengagement strategies was also negatively associated with academic achievement. Self-regulatory efficacy to resist the temptation to engage in high-risk activities showed a direct relationship to academic achievement, as well as an indirect one, in that it discouraged moral disengagement and the participation in problem behaviors (e.g., inattentiveness, aggressive behavior, transgressive behavior).

For the purposes of the present research, the main findings of concern were as follows. Academic self-efficacy and academic aspirations were negatively related to moral disengagement; peer regard was positively related to moral disengagement. Moral disengagement was found to be a mediator of the relationship of achievement to academic efficacy and self-regulatory efficacy to resist peer pressure to engage in transgressive behavior. Moral disengagement was negatively related to academic achievement. As stated by Bandura (1996b), the ability to cognitively justify transgressive conduct is inconsistent with academic engagement. Based upon this evidence from Bandura, academic self-efficacy and

academic aspirations were included predictors of moral disengagement in the proposed model for the present research. Also, self-regulatory efficacy to resist peer pressure to engage in transgressive behavior was adapted for the present research. It was modified to specifically assess self-regulatory efficacy to resist cheating.

Sykes' and Matza's (1957) early work on neutralization and delinquency is an important precursor of current Social Cognitive perspectives on deviant behavior.

Neutralization is defined as a set of cognitive justifications which may be employed by the individual who commits an act that violates his moral code. Techniques of neutralization serve the key personal and social purpose of allowing one to escape censure by self and others. They may be used before, during, or after the deviant behavior.

Techniques of neutralization are conceptualized as falling into five basic categories (Sykes & Matza, 1957). Denial of responsibility is the first technique by which deviant behavior is attributed to external, uncontrollable forces. Denial of injury is a second form of neutralization which allows one to feel that deviant behavior, while violating an established moral code, does not really cause any significant harm. A third form of neutralization, denial of the victim of deviant behaviors, permits one adopt the role of a sort of grand policeman whose function it is to punish and avenge other wrongdoers; victims are perceived as wrongdoers. Condemnation of the condemners is a fourth technique whereby one attempts to lose sight of one's wrongful actions by devaluing those who conform to the established moral code. The fifth form of neutralization, appeal to higher loyalties, involves the embracing of the norms of a deviant peer group while not necessarily rejecting the dominant moral norms. The parallel between the Sykes and Matza study and Bandura's (1996a, 1996b) work on moral disengagement is obvious.

Minor (1984) examined the idea of neutralization as a hardening process, whereby an individual engages in deviant behavior and then must neutralize the behavior by formulating self-exonerative statements. These neutralizations pave the way for future deviant behavior; the escalation of tolerance for deviant behavior is referred to as *hardening*.

Minor (1984) draws attention to the fact that in most studies, the effects of neutralization are confounded with those of inhibited moral beliefs. Therefore, one usually cannot be certain as to whether observed cheating or other deviant behavior is due to the use of neutralizing statements or to the absence of moral beliefs that would inhibit cheating. The author implies that this problem is an example of the chicken/egg phenomenon: which is causally primary, the deviant act or the belief that justifies that act (Minor, 1984)? As will be seen below, the present research seeks to eliminate this issue by direct examination of cheating beliefs prior to the examination of cheating behavior.

Minor (1984) used a two-wave panel study to assess college students' moral attitudes toward, degree of excuse acceptance for, and participation in several types of mildly delinquent behavior (e.g., cheating on exams, marijuana/cocaine use, shoplifting). This type of design is important for establishment of the direction of any causal relationship between deviant actions and neutralizations for those deviant acts. He concluded that there is some support for the idea of a hardening process being responsible for continued delinquent behavior. This hardening can be conceived of in two ways, according to Minor. First, the hardening can be viewed as moral erosion, such that increasing excuse acceptance for questionable behavior at one time point increases the likelihood that this behavior will be approved at a later time point, even in the absence of neutralizing excuses. A second view of the hardening process suggested by Minor is that judgments regarding the morality of a given behavior influence future behavior, which then affect subsequent judgments pertaining to the morality of behavior.

Minor (1980) contends that those who engage in delinquent behavior accept the socially conventional standards of morality. However, he also maintains that these individuals are more adept at formulating self-exonerative excuses for their behavior than those whose behavior is closely aligned with typical standards of morality. As stated by Minor, the use of neutralization "calls attention to particular features which make the present case an exception to the usual moral rule (p. 103)." This perspective is clearly supportive of the proposed moral disengagement model in the present research, because it accounts for the endorsing of socially conventional standards of morality while at the same time allowing the violation of those standards by the use of self-exonerative excuses.

The Minor (1980) study compares the tendency to use techniques of neutralization among murderers, burglars, and robbers. In terms of degree of commitment to conventional norms of morality, killers were found to be more likely to endorse obedience to the law than either burglars or robbers. This finding was attributed to the frequent occurrence of murder as a "crime of passion" that should not necessarily impact on general tendencies toward engagement in illegal/immoral behavior. No difference was observed between burglars and robbers in their commitment to conventional standards of morality.

Minor (1980) also hypothesized that offenders would be more approving (or excuse accepting) of the offense for which they were incarcerated. This hypothesis was not supported by Minor's findings. He states that these findings point to the conclusion that "offenders are not [attitudinally] committed to their misdeeds (p. 111)." In other words, they do not endorse the morality of such deeds. Minor also found that the type of preferred neutralization does not reliably distinguish the type of criminal offender, such that murderers do not necessarily favor denial of responsibility or denial of the victim any more than other types of offenders. Again, these findings are consistent with Bandura's (1996a) belief that those who are more likely to

rely on strategies of moral disengagement are as likely to hold conventional moral beliefs as those who do not.

Regoli and Poole (1978) also concluded that delinquents are not committed to their misdeeds; they tend to endorse similar standards of moral conduct to non-delinquents. Regoli and Poole state that delinquents tend to "drift into and out of delinquent behavior (p. 267)," which the authors attribute to the delinquent's holding of "middle class values" with a simultaneous need for excitement or thrill seeking.

Neutralization and commitment to misdeeds was also examined by Austin (1977). He presents evidence for a somewhat contrary position. His findings resulted from the study of delinquents (i.e., those involved with major, moderate, and minor theft; auto theft, vandalism, and assault). Austin contends that for those exposed to a typical pattern of socialization (i.e., assuming the absence of organic dysfunction), most individuals are expected to adopt and exercise some degree of moral restraint. According to Austin, there are individual differences in the degree to which restraint is neutralized; neutralization occurs by means of acceptance of unconventional moral attitudes in general, not only neutralizing "beliefs (p. 136)." He further states that with increasingly unconventional beliefs, there is a greater likelihood that a serious violation of the normal standards of moral conduct will occur. Within his view, neutralization is conceived of in terms of unconventional commitment (i.e., commitment to unconventional norms). Austin views neutralization as varying degrees of commitment to unconventional moral beliefs, whereas Sykes and Matza (1957) view neutralization as a situationally determined process that occurs while an individual continues to maintain conventional moral standards.

Austin provides evidence for a direct relationship between unconventionality and conduct that violates moral norms. Unconventional commitment is believed by this author to

influence actual participation acts that violate conventional norms, contrary to the hypotheses of Sykes and Matza (1957). Among his sample of delinquent boys, the rate of unconventional commitment (operationalized as the willingness to violate the law and conventional norms of morality) varied between approximately 31% and 57%, depending on the type of delinquency in which the subject reportedly engaged. Those admitting to assault were the least likely in the sample to exhibit unconventional commitment, while those admitting to major theft were the most likely to show this tendency.

Austin notes that assessments of the degree to which an individual is judged to be unconventionally committed is contingent upon the type of measure used. The degree of unconventional commitment was measured in one of two ways: 1.) willingness to violate conventional norms or 2.) a combination of willingness to violate conventional norms *and* willingness to violate the law. When only willingness to violate conventional norms of morality is considered in the determination of unconventional commitment, the rankings of unconventional commitment for each type of delinquency remain nearly identical. However, when unconventional commitment was measured using a combination of willingness to violate conventional norms and willingness to violate the law, 24% of those admitting to assault expressed a willingness to violate conventional moral norms, while nearly 43% of those admitting to major theft expressed a willingness to do so.

An argument could be made that by using the *combined* measure of unconventional commitment, the addition of the component that assesses the willingness to violate the law is not necessarily relevant to one's moral principles. An individual may view endorsement of law breaking as a different issue from the violation of a moral principle. In fact, adhering to one's moral principles may *require* an individual to break the law on occasion (e.g., conscientious objectors who refuse to participate in combat or individuals whom Kohlberg [Colby & Kohlberg,

1987] may classify as Postconventional in their reasoning). As such, to include an assessment of one's willingness to violate the law may contaminate the measurement of commitment to either conventional or unconventional norms.

The above findings point to a general trend that those who violate the standards of traditional moral behavior tend to accept conventional moral norms. In turn, these findings are consistent with the work of Bandura (1996a, 1996b) and with the theoretical model proposed in the present research. Both Bandura and the proposed model hypothesize that the person who commits delinquent or deviant acts continues to maintain conventional moral beliefs, although s/he is able to find features of a given situation that make those beliefs irrelevant, and thus those beliefs are able to be set aside in that situation.

Theoretical Research Directly Examining Cheating

The previous section considered theoretical work pertaining to delinquent behavior in general. In the second main section of the literature review, consideration is given to the recent theoretically based research focusing specifically on cheating. Again, discussion will be confined to Social Cognitive and related perspectives.

One key study by Bandura was particularly influential in stimulating the present research. In this study (Bandura, 1996a), he examined the relationship of moral disengagement to delinquent behavior. Included in Bandura's assessment of delinquent behavior were theft, academic cheating, lying, destructiveness, truancy, and use of alcohol and drugs. Students who tended to rely more heavily on strategies of moral disengagement were more quick-tempered, tended to dwell on perceived wrongs done to them, experienced less guilt, and were less likely to feel the need to make amends for injurious behavior toward others.

High moral disengagers were more likely to commit acts of interpersonal aggression and delinquency. Moral disengagement influenced the tendency to engage in delinquent

behavior both directly and indirectly. The indirect influence was through a reduction in prosocialness and guilt, as well as a subsequent increase in aggression proneness. Moral disengagement had a similar influence on aggressive behavior; those with a greater tendency to use strategies of moral disengagement were less prosocial and experienced less guilt when they engaged in destructive acts. The lower levels of prosocialness and guilt allowed the disinhibition of aggressive actions. Unlike the influence of moral disengagement on delinquent behavior, no direct relationship was found between moral disengagement and aggressive behavior.

In this study, moral disengagement again was found to be related to prosocialness, with the most frequent moral disengagers being the least prosocially oriented. High disengagers were also more likely to be rejected by their peers. Bandura notes the lack of a stable relationship between peer popularity and moral disengagement, which he attributes to the possibility of rejection by prosocial peers and subsequent acceptance by deviance-oriented peers.

Bandura (1996a) provides some preliminary evidence for a relationship between the tendency to morally disengage and delinquent behavior. This study, although it addresses cheating as one component of delinquent behavior, does not provide specific enough evidence for the relationship of cheating itself to moral disengagement. This study also does not address whether those who morally disengage actually do hold similar moral standards to those who do not disengage, which is a key component of Bandura's model of moral disengagement. In fact, the pivotal question for the present research is exactly that: do cheaters and non-cheaters share the same moral standards? The evidence that follows suggests that both cheaters and noncheaters tend to hold anti-cheating moral standards.

The first piece of this evidence comes from Eve and Bromley (1981) and their consideration of whether cheaters commit themselves to alternate (i.e., "unconventional") moral standards. Culture Conflict Theory, as discussed by Eve and Bromley is related to unconventional commitment in that Culture Conflict Theory views deviants as possessing moral norms that conflict with those of a "more powerful external group (p. 4)." Delinquents are viewed as committed to subgroup norms rather than to conventional group norms. As in the Austin (1977) study, commitment to the values of a subgroup was considered an "unconventional commitment." Culture Conflict Theory was contrasted to Social Control Theory, and the relative predictive ability of each theory was examined.

Social Control Theory views deviance as resulting from a damaging of the commitment to conventional normal norms. When deviance occurs, it is viewed as a failure in the socialization process. Social Control Theory posits one universal set of moral standards for all individuals within the society, although the controlling link between social norms and actual behavior may be broken. This broken link between social norms and behavior thus gives an individual (cognitive) license to engage in deviant behavior. This view is contrasted with Culture Conflict Theory, in which an alternate set of moral norms is proposed for those who tend to engage in deviant behavior. Culture Conflict Theory views the deviant as a successful example of socialization, albeit socialization within the context of subgroup moral norms (Eve & Bromley, 1981).

Eve and Bromley (1981) conducted factor analyses to formulate scales corresponding to each of these two theories in order to provide evidence that these theories were able to predict deviant behavior. Both scales showed a significant ability to predict cheating among college students. The authors suggest that these findings may be partially explainable in terms of a school's "social orientation" versus its "academic orientation." They state that high levels

of social emphasis (e.g., extracurricular activity, Greek organizations) in the climate of a school may be linked to greater levels of cheating, which may explain the predictive ability of Culture Conflict Theory, since an excessive orientation toward special interest social groups may incline students toward commitment to subgroup moral standards. It is for this reason that Culture Conflict Theory may have a significant ability to predict student cheating.

On the other hand, Social Control Theory may be better able to predict cheating in a school that is very (academic) performance-oriented. In such a school, the overriding concern is expected to be academics, which will become the basis for determining conduct. Social Control Theory would predict that these students would adopt the within-school norms of high academic standards that are attained through honest means. However, this theory would also concede that although students who function within this type of academic climate are expected to hold the achievement of high grades and academic honesty as their personal standards, they may not always live up to these standards. The failure to behaviorally enact one's standards in a given context in no way negates the holding of the standards themselves according to Social Control Theory. In schools that have a more balanced combination of social and academic orientations, it would stand to reason that both Social Conflict and Social Control Theories would have predictive ability with regard to cheating.

Eve and Bromley found that all of the 15 assessed cheating behaviors was judged to be dishonest by a majority of the students in the sample; however, there was not complete unanimity on any of the items. It would seem that, as a whole, students recognize and endorse the dominant social norms of morality in the cheating context.

The Eve and Bromley work is relevant to the concerns of the presents research in that it was designed to test whether cheaters hold an anti-cheating standard or whether they adopt the standards of a "cheating subgroup." Social Control Theory is closer to the proposed

theoretical model of cheating, in that it hypothesized that the controlling link between a universally held moral standard (i.e., an anti-cheating standard) is broken, which allows cheating to occur. The authors do not specify the mechanism of this "break," but this conceptualization of cheating fits well with the proposed model. In the proposed model, the mechanism that allows the break between moral principle and actual behavior is hypothesized to be moral disengagement.

The fact that Culture Conflict Theory was also able to reliably predict student cheating, however, requires further analysis. The authors suggest that the predictive ability of Culture Conflict Theory may be attributable to a school's overly social (versus academic) orientation. As such, it would seem that an extreme focus on social activity would define the major norm group, rather than a subgroup. Culture Conflict Theory hypothesizes that cheaters hold moral norms of a subgroup, rather than those of the dominant norm group. This finding seems to support Bandura's contention that students are not expected to cheat in the presence of alternative means of achieving their goals, be they academic achievement, social prestige, etc. Since an overly social focus is the expected norm at schools with a social orientation, the students' goals may be more in line with the achievement of social reinforcement and the achievement of social status. As such, they disengage their moral standards (because the overly social context may allow them to do so) and cheat. It is important to recall that a majority of *all* students agreed on the unacceptability of the 15 assessed cheating behaviors. Thus, perhaps the students at socially oriented schools would be more prone to the use of moral disengagement when faced with potential cheating situations.

In another study, Calabrese and Cochran (1990) examined the relationship of *alienation* to cheating, also in an effort to determine whether cheaters hold a similar set of moral standards to non-cheaters. Alienation was defined as students' rejection of the norms of

society, which leaves them unable to derive personal relevance from the events in their daily existence (Calabrese & Cochran, 1990). Alienation is thought to manifest itself through antagonistic relationships with family, school, society, peers, and self. Alienated individuals are defined as those who perceive themselves as lacking in personal agency; they feel unable to control the outcomes of their behavior. Alienation is also associated with perceptions of isolation from significant others and societal institutions (Calabrese & Cochran, 1990).

These authors assessed two types of alienation: social alienation and context-specific alienation. Socially alienated students were those who did not have plans for the future, came from a home in which both parents did not reside with the student, were "irreligious" (i.e., did not attend church at least once a week), and had been arrested. It is particularly interesting that religiosity was assessed in the negative, as a *failure* to be religious. In the present society, it is not necessarily the social or moral norm to be religious or to participate in formal religious observation. Many individuals whom society would judge as falling within a "normal" ethical range of behavior profess no religious beliefs whatsoever. Thus, it is puzzling why these authors would consider failure to participate in religious services as a rejection of social moral norms.

Context-specific alienation included perceptions of teachers as unfair, perceptions of the school as unfair, and reported disliking of school. In this study, context-specific alienation was designed to reflect students' perceptions of isolation and detachment from their educational environment.

Calabrese and Cochran (1990) found that affluent private school students were more likely to report potential involvement in academic dishonesty than students from a large, urban high school. The reported frequency of actual cheating was not assessed by these authors. Rather, they inquired about students' perceptions of the likelihood that they *would* engage in

each of nine academically dishonest behaviors, *if they had the opportunity and if they were assured that there was no possibility of being caught.*

Context-specific alienation was associated with a greater tendency to report potential involvement in cheating. Students who perceived school and teachers to be unfair, and who reported disliking school were more likely to express a willingness to participate in cheating given the above constraints of opportunity and freedom from consequences. However, the relationship of social alienation to potential cheating was not as clear. Being raised in a “broken home” and the lack future plans were not associated with potential cheating, although irreligiousness and having been arrested did show a significant, positive relationship to potential cheating. The authors stress that the relationship between either type of alienation and potential cheating cannot necessarily be interpreted as a causal relationship. They offer an alternative explanation, that cheating may cause alienation, rather than vice versa.

Taken as a whole, the Calabrese and Cochran (1990) findings are consistent with the work of Bandura (1996a; 1996b) and with the model proposed in the present research. Their findings concerning the relationship of context-specific alienation to (potential) cheating echo Bandura’s hypothesis that (deviant) behavior is contextually bound. More specifically, the elements of context-specific alienation considered by Calabrese and Cochran can be integrated into a moral disengagement model. For example, students’ perceptions of school and/or teacher unfairness are consistent with Bandura’s “casting blame upon the victim” strategy; a student finds it acceptable to cheat in situations where s/he feels that anticipated poor performance is someone else’s fault. Further, cheating may be rationalized when one dislikes school by “denying the consequences” of one’s behavior (Bandura, 1996a), such that one might state that, “It doesn’t really matter if I cheat... it’s not as if they teach us anything

relevant to *real life...*" Thus, the way in which social alienation was operationalized by these authors may just as easily be conceptualized in terms of moral disengagement.

In terms of the findings regarding social alienation, it is not surprising that the results were not entirely consistent. The use of a broad-based construct such as (generalized) social alienation is likely to be problematic from the perspective of Social Cognitive Theory and that of the present research. Such a construct seeks to address the issue of alienation across contexts, rather than within a specific context. Social Cognitive Theory in particular is very strong in its emphasis on the need to consider context as a determinant of behavior. Therefore, the findings regarding context-specific alienation are, not surprisingly, more consistent; they confine the assessment of alienation to the educational context.

A concept that is closely related to alienation is Sternberg's (1996) notion of the disengaged student. Sternberg's conceptualization of the disengaged student was derived in an attempt to explain declining levels of academic achievement. In its most basic form, disengagement within Sternberg's framework refers to low levels of personal investment in the academic process. Disengaged students achieve less academically in terms of SAT scores and proficiency in the major academic subject areas; yet, they are not less intelligent, as measured by intelligence tests. Student disengagement has been reported at all levels of academic ability.

Sternberg (1996) states that engaged students are distinguishable by consistent class attendance and homework completion, "reasonable" class effort, and an absence of cheating. Academically engaged students exert effort in school, reportedly because they perceive academic activity to have value. This exertion of effort leads to feelings of pride in resulting achievement. Conversely, disengaged students demonstrate irregular class attendance, little class effort, and a failure to complete assignments. They tend to select easier courses and are

more likely to engage in cheating behavior. Disengaged students are more likely to report that they are just “going through the motions” and that they get through the school day most often by fooling around with friends (Sternberg, 1996). They are also likely to report inattentiveness and boredom.

Students who are academically disengaged may endorse the value of education, but they are only willing to comply superficially with the demands of the educational process, since they are prone to cheating and poor class attendance. They believe that on some level they should participate in the educational process, yet their actions evidence a pattern of little learning and effort. Thus, in a very superficial way, these students comply with society's expectation that they become educated; they “go to school.” However, this standard of obtaining a good education is suspended within many daily contexts, such as when deciding whether to prepare (honestly) for a given test, to do a specific homework assignment, or go to school on a given day.

Academically disengaged students often believe that they must cheat in order to avoid negative academic consequences, such as expulsion or failure, and they justify cheating as necessary in order to meet their goal of completing their education. Since disengaged students are not willing to be emotionally or cognitively engaged in the educational process, despite the societal expectation that they become educated, their educational experience is marked by cutting corners whenever possible.

It is important to note the important role that Sternberg (1996) assigns to peer influence in the development of student engagement. Sternberg contends that students who are actually interested in being engaged (e.g., exerting effort on academic tasks, honestly completing academic tasks) receive little peer support within most high schools, since fewer than 5% of all

students identify themselves with a social group mainly defined by academic excellence. He stresses the peer norm of "getting by without showing off (p. 146)."

Sternberg provides further evidence that peer influence is a powerful determinant of academic engagement. Students who have friends with an academic orientation (as defined by high grades, a tendency to invest a significant amount of time on homework, aspiration to attend college, and involvement in extracurricular activities) performed better academically than those with friends who were less academically oriented (Sternberg, 1996). Conversely, students with friends who were oriented toward delinquency (e.g., cheating, use of drugs or alcohol, conduct problems) were themselves more likely to experience academic problems. As noted by the author, parents are more able to influence the long-term educational goals of their children, while peers have a more direct influence on students' proximal educational goals, such as whether to do the homework assigned on a given night or the amount of effort they expend to complete an assignment.

Sternberg's model is consistent with Bandura's (1996a, 1996b) model of moral disengagement, in which individuals are hypothesized to maintain a moral standard that is unaccepting of deviant behavior, but they are able to justify behavior that violates the standard in the presence of certain situational features. Within Sternberg's overall framework, student engagement can be conceived of as a mediator of both academic dishonesty and achievement. Disengaged students endorse a general standard of valuing education in that they take steps to secure their graduation. However, within the specific contexts of everyday academic life, they frequently suspend this standard of valuing education, preferring instead to rely on cheating and a variety of other strategies to carry them through their academic careers. Deficient motivation for participating in academic activity gives rise to academic dishonesty. The societal standard of obtaining a "good" education is set aside in daily practice, and the

disengaged student cheats, ironically, as a means of obtaining that "good education." These disengaged students do not wish to have negative educational self-concepts (e.g., as "uneducated" or as "cheater.") Thus, rather than overtly refusing to participate in an educational process which is viewed as having little personal relevance, disengaged students are motivated to participate superficially in the process in order to avoid personal sanctions, as well as those from society at large.

Another study relating to the issue of whether cheaters and noncheaters have adopted similar moral standards is the work on neutralization by Daniel, Blount, and Ferrell (1991). In this study, four variables were examined for their ability to predict perceived academic misconduct. Teacher education students were required to make judgments about whom they believed cheated more frequently: Students who are older or younger, single/married; more/less serious (i.e., with regard to academic pursuits), or more/less academically able. These four student characteristics were conceived of in terms of the level of maturity/commitment to academic pursuits. These maturity/commitment variables were not good predictors of perceived academic misconduct. However, when neutralization (i.e., score on a 11-item neutralization scale) was added to the analysis, it was the only variable that added significantly to the prediction of perceived academic misconduct. Excuses for cheating in this sample of teacher education students were most often related to course difficulty and lack of sufficient preparation time.

These findings provide clear evidence in support of a moral disengagement model of cheating, given the very close theoretical parallel between neutralization and moral disengagement. (Of course, psychometric evidence of the similarity of these two constructs would be useful.) Further, the fact that the maturity/commitment variables failed to be significant predictors of cheating provides additional evidence that a single stage model of

cheating is not adequate. Specifically, it is notable that the type of variables that failed to predict cheating were consistent with a static model of cheating (i.e., attempting to predict cheating from static entities such as beliefs), and that the only variable that was found to be a significant predictor of cheating was neutralization, a variable that is by nature contextually defined.

Haines, Diekhoff, LaBeff, and Clark (1986) also examined the ability of immaturity/commitment to academic pursuits and neutralization to predict cheating in college students. Cheaters were found to be more likely to use neutralizations. High neutralizers reported being most likely to be deterred from cheating by institutionally imposed consequences, such as receiving a failing course grade. High neutralizers were least likely to be deterred by guilt or peer disapproval, which is consistent with Bandura's (1996a) findings that high disengagers are more likely to be rejected by their peers. The authors state that while students recognize cheating as an undesirable behavior, they are adept enough at neutralization under the right circumstances that neither their own cheating nor that of their classmates presents a significant moral dilemma.

Cheaters in the Haines et al. (1986) study were more often younger, single, less able students, supported by their parents, and involved in extracurricular activities and fraternities/sororities. Age was the only one of these variables that was as consistently related to cheating as was neutralization. These authors made the overall conclusion that cheaters tend to be immature individuals who are weakly committed to academic pursuits, and who possess a neutralizing attitude toward cheating. The fact that cheaters are more likely to show a weak commitment to academic pursuits may be viewed in terms of moral disengagement in the present research model. A student may justify setting aside one's typical anti-cheating standard by downgrading the importance of educational activity as a whole. The Haines et al.

findings are also consistent with Sternberg's (1996) portrayal of the disengaged student as superficially committed to academic pursuits and willing to cheat in order to minimally satisfy the academic demands placed upon him/her.

In sum, the above findings relating to delinquency in general, and cheating in specific, support Bandura's (1996a, 1996b) notion that those who engage in morally unacceptable behavior tend to hold similar moral standards to those who do not. Given the fact that both cheaters and non-cheaters are expected to have acquired their moral standards through similar socialization processes, it is not surprising that both groups tend to hold similar moral standards. Yet, it remains to be explained why these standards frequently are not the basis for behavior. The theoretical evidence presented above suggests that a moral disengagement model may help to account for this inconsistency between moral beliefs and behavior.

Atheoretical Cheating Research

Much of the recent cheating literature does not fit into a specific theoretical framework. For the sake of convenience, it will be referred to in this third main area of the literature review as "atheoretical" or "general" cheating research. This general cheating research often examines a set of variables to determine its relationship to academic dishonesty. The type of variables selected often can be classified as either individual difference variables or situational (i.e., contextual) variables. This section will contain a discussion of the relevant research pertaining to the individual difference and situational variables, respectively, that have been associated with student cheating. It was important to determine the variables that have been linked to cheating because the present research sought to specify some of the individual difference and situational factors that may act upon students' personal anti-cheating beliefs to encourage them to disengage those standards.

Individual Difference Variables as Predictors of Academic Dishonesty

This section contains a review of the relevant research regarding individual difference variables as predictors of student cheating. These variables are considered individual difference variables because they reflect internal student qualities that are expected to vary along a continuum. Three individual difference variables were selected for review because of their relevance to the present research. The following three individual difference variables are discussed below: personal anti-cheating beliefs, religiosity, and level of academic achievement.

Anti-cheating Beliefs. The first individual difference variable that will be considered is Anti-Cheating Beliefs. Although it is not always given conscious attention in the literature, one of the fundamental underlying issues in constructing a model of academic dishonesty must be the behavioral constituents of cheating. The following discussion will highlight the fact that beliefs about the behaviors that actually constitute cheating vary somewhat between and among students and teachers. This section is especially concerned with clarifying students' declarative knowledge about cheating. It is crucial to ascertain students' knowledge about what cheating *is* in order to determine whether cheating actually involves the absence of beliefs that certain behaviors constitute cheating (and are, therefore, unacceptable), or whether cheating occurs as the result of setting aside of one's anti-cheating beliefs, as was proposed in the present research.

It is the purpose of this section to provide evidence that beliefs about cheating vary amongst and within certain groupings of people. If it can be shown that beliefs about the acceptability of various cheating-related behaviors are contextually variant, such evidence could be interpreted as further support of the present research model which hypothesizes that cheaters can maintain an anti-cheating moral code that they may set aside in the presence of

certain situational conditions. Discussion in this section will include a consideration of differences between teacher and student cheating beliefs and cross-cultural differences in cheating beliefs.

Teacher-Student Differences in Cheating Beliefs. The first type of difference in cheating beliefs contrasts beliefs between and among teachers and students. Evans and Craig (1990) compared the cheating beliefs of junior and senior high school students with those of teachers. As one might expect, teachers viewed cheating as a more serious problem than did students. Teachers were also more consistent than students in their judgments of the behavioral constituents of cheating, indicating that teachers as a group more often agreed with other teachers than students agreed with other students in their assessments of what is considered academically dishonest. Teachers were more consistent than students in their perceptions that cheating can be both an active and a passive process (i.e., that receiving, as well as giving, unauthorized information is a form of cheating).

Certain aspects of plagiarism were troublesome for both teachers and students (Evans & Craig, 1990). Although teachers demonstrated near unanimous consensus, and even most students agreed that word-for-word copying from a reference source would be considered cheating, less certainty was displayed in both teachers' and students' assessments of other plagiaristic activities. For example, a significant number of teachers, and even more students (particularly junior high school students), failed to perceive uncredited paraphrasing as cheating.

Graham, Monday, O'Brien, and Steffen (1994) also compared the cheating beliefs of teachers and students. As in the Evans and Craig (1990) study, they found greater agreement among teachers than among students regarding the critical attributes of cheating. Students believed that receiving information from another student is more seriously wrong than allowing

information to be taken. Students perceived active cheating to be a more serious offense than passive cheating, but professors did not distinguish between these two types of cheating.

In the Graham et al. (1994) work, college faculty members rated all examined cheating behaviors as more severe in nature than their students did. When cheating behaviors were ranked for severity, both faculty and students rated the same three behaviors as most severe: "Taking a test for someone else," "Copying someone else's term paper," and "Having someone write a term paper for you."

Faculty members underestimated students' perceived severity of each of the examined cheating behaviors. However, students had a better understanding of faculty perceptions of the severity of each cheating behavior, as students were more accurate in their ratings of faculty perceptions. In terms of behaviors that might be considered cheating, faculty perceived students as having more liberal standards than they themselves reported having, while students accurately perceived faculty standards as stringent.

A third study that investigated differences in cheating beliefs between teachers and students was Roig and Ballew's (1992) study of college students. Students were found to be more lenient than professors in their perceptions of what constitutes cheating. They also perceived themselves to be more lenient in their attitudes toward cheating in that they viewed questionnaire cheating behaviors as more acceptable for themselves than they believed professors would view these behaviors. Students majoring in Business and Economics were the most tolerant of cheating.

As in the Graham et al. (1994) study, students in the Roig and Ballew study more accurately perceived professor's standards of cheating than professors perceived students' standards. Students' perceptions of professors' acceptance of cheating did not differ significantly from professors' own ratings of acceptance of academic dishonesty. However,

professors perceived students to be significantly more accepting of cheating than students reported themselves to be.

Cultural Differences in Cheating Beliefs. A second type of research pertaining to differences in cheating beliefs includes cross-cultural studies. The purpose of including cross-cultural research here is to provide evidence that students' cheating beliefs are culturally variant, and thus, not universal. In the same way that cheating beliefs vary as a function of one's context as either a student or a teacher (e.g., Evans & Craig, 1990), cultural variation in cheating beliefs helps to support the present research model which hypothesizes that cheating beliefs are not static entities, but rather, they are situationally sensitive.

Evans, Craig and Mietzel (1991) conducted a cross-cultural study of the cheating beliefs of Costa Rican, German, and American high school-aged students. Both cooperative and individual cheating behaviors were perceived as cheating significantly less often by Germans than they were by Costa Rican and American students. Americans were more likely than the other two groups to rate cooperative behaviors as cheating. The authors point out that this difference in the perception of cooperative behaviors may reflect differences in teaching style in each respective country (e.g., American students are encouraged to "do their own work"). In contrast, plagiarism and various types of passive cheating considered in this study were likely to be reported as cheating by German students than by either American or Costa Rican students. Regardless of country, students displayed greater consensus in their perceptions of cheating on tests compared to plagiarism on written papers.

It can be hypothesized that there was greater agreement on cheating during test-taking than during written assignments because tests are usually given under very restrictive conditions. Knowledge of the rules of test taking is more easily grasped, perhaps because test conditions are more standardized (e.g., place, time, allowable resources). "It is *always*

wrong to copy from another student's paper." or "It is *always* wrong to use crib notes." In contrast, the rules of writing are more conditional; sometimes one must give credit to the author and other times it is not necessary. Writers often give their work to others to gain feedback for revisions. Writers often have considerable latitude to obtain help and information from external sources without cheating. However, some behaviors clearly constitute plagiarism, such as buying a paper from a research service, turning in another student's work as one's own without his/her knowledge, having another person write a paper for oneself, copying a paper from a research source without giving proper credit to the source's author, copying from a reference source and giving proper credit to the author but omitting quotation marks, and paraphrasing from a source and failing to attribute the paraphrased ideas to the original source (Wilhoit, 1995).

As one becomes more and more knowledgeable in a given domain, the question of when a thought is truly one's own and when it is not becomes increasingly complex. Consequently, so do decisions regarding the necessity of proper acknowledgment of the source. Since teachers themselves are less clear on what constitutes plagiarism than they are of what constitutes a violation of test taking rules, teachers must become more educated about plagiarism before they can expect students to have a clear understanding of this offense.

In a second cross-cultural study of cheating beliefs, Stanwyck and Abdelal (1984) provided some enlightening anecdotal comments that further suggest that cheating beliefs are culturally, and thus situationally, variant. The authors discussed one student from Colombia who stated that within his culture, cheating is viewed amorally. This student is mentioned as viewing competition as existing among only a very few top students. For the other students, refusal to allow copying from one's paper would be "most uncomfortable and very impolite (p. 11)." The authors make the analogy of cheating being akin to whispering or passing notes

when the teacher is not looking (p. 11). Not allowing others access to one's paper for the purpose of copying is perceived as failing to help another. In other words, within this cultural framework, cheating is viewed as "value-neutral" (Starwyck & Abdelal, 1984).

Enker (1987) provides a third cross-cultural source of support for the notion that cheating beliefs are culturally flexible. She examined the attitudes of teacher education students in Israel and in the United States. Israeli teacher education students were significantly more likely to report a favorable attitude toward copying from others during an exam and giving answers to others during an exam. They were also more likely to report a more favorable attitude toward plagiarism, but this difference did not reach significance. American teacher education students reported significantly less societal acceptance of copying from others during an exam, giving answers to others during an exam, and plagiarism than did the Israeli students reported for Israeli society. Finally, Israeli students reported actually engaging in more giving and receiving of test answers. The Israeli students also reported more plagiarism, but this difference did not reach significance. Overall, then, the Israeli students reported significantly more cheating and significantly fewer negative attitudes, both personal and societal, toward cheating than the American students.

Enker (1987) also found that normative beliefs (i.e., those of society, parents, friends, and classmates) regarding the acceptability of various types of cheating were found to be better predictors of behavior than were attitudinal beliefs (regarding the acceptability of cheating) for the Israeli students. For American students, both attitudinal and normative beliefs were predictive of self-reported cheating. Family normative beliefs were highly related to reported cheating behavior in the Israeli students, whereas societal norms were not. Friends', classmates', and societal norms regarding the acceptability of various forms of cheating were

the most strongly associated with American students' reported cheating behavior; family norms were not predictive.

Enker's (1987) finding that various types of social norms regarding cheating were predictive of cheating is consistent with the Social Cognitive view that social support for behavior helps to determine its occurrence. It is also important to note that attitudinal beliefs were predictive of cheating for the Americans but not for the Israelis. This finding again highlights the inadequacy of a single stage model of cheating because attitudinal beliefs alone are not sufficient to predict cheating for students in all contexts.

General Conclusions: Cheating Beliefs Across Contexts. In sum, these findings regarding individual differences in the endorsement of anti-cheating beliefs point to a number of general conclusions. For the purposes of the present research, emphasis was given to two specific dimensions on which cheating beliefs have been shown to vary: teacher versus student beliefs and cross-cultural beliefs. Cheating beliefs may also vary on other dimensions, such as ethnicity (e.g., Sutton & Huba, 1995) and gender (e.g., Genereux & McLeod, 1995; Ward & Beck, 1990; Lewis and Hartnett, 1983). The evidence generally supports the notion that there is a certain degree of flexibility cheating beliefs across these social and cultural groupings. However, there is also a substantial amount of commonality in peoples' perceptions of what behaviors constitute cheating. There is some evidence to support the idea of fundamental "core" behaviors that most people within a culture would designate as cheating. There are also "gray areas" in their perceptions of cheating, particularly with regard to plagiaristic activity. Although there is evidence to suggest that students are more liberal in their perceptions of what constitutes cheating (e.g., Graham et al., 1994; Roig & Ballew, 1992), it is important to note that students and teachers both ranked the same three behaviors as the most serious types of cheating (Graham et al., 1994). There may be certain

behaviors that are more prototypical of the cheating domain than others (Rosch & Mervis, 1975).

As a whole, students are aware of culturally-normative beliefs regarding cheating, and they largely adopt them as their own (Enker, 1987). This conclusion is consistent with the present research model because it was proposed in this model that cheaters have adopted the social norm prohibiting cheating. The anti-cheating norm, however it is manifested within a given social or cultural grouping, may be selectively deactivated in the presence of appropriate situational cues.

Religiosity/Moral Reasoning. The second individual difference variable that will be considered is Religiosity/Moral reasoning. Religiosity and/or moral reasoning are important to the present research model for reasons similar to those discussed above for Anti-cheating beliefs. The proposed model would view religiosity as the extent to which an individual possesses a formalized code of moral principles and the degree to which those principles form the basis for behavior. Moral reasoning is discussed here because it also refers to an individual's system of moral thought. The research regarding religiosity and moral reasoning must be viewed within the context of the proposed two-stage model. As will be seen from the discussion below, the results regarding the association between cheating and religiosity/moral reasoning are not consistent. Religious principles or principles of moral reasoning alone are not expected to be adequate predictors of cheating behavior.

The relationship of moral reasoning to cheating was investigated by Guttman (1984). It was found that students from an Israeli religious public grade school displayed a higher level of moral reasoning than those from an Israeli secular public grade school. A test of cognitive morality required students to select one of two possible resolutions to each of seven moral dilemmas; one solution involved yielding to temptation while the other did not. The degree to

which students endorsed yielding to hypothetical temptation was interpreted as a measure of the degree to which they would yield to actual temptation. Moral reasoning was assessed by means of students' selection of the reasoning behind either yielding to or resisting temptation in seven moral dilemmas. Possible justifications for yielding or resisting the hypothetical temptations were: the severity of the anticipated punishment, the tendency to confess, the level of fear, or the level of guilt associated with the story character's chosen course of action. Higher levels of moral reasoning were associated with a greater ability to resist hypothetical temptation to cheat on test of cognitive morality.

This relationship did not hold for Guttman's behavioral measure of cheating, which required students to complete a Maze test with their eyes closed and without supervision. A near-zero correlation was observed between the ability to resist hypothetical temptation (as measured by the test of moral reasoning) and the actual ability to resist temptation on the Maze test.

On the test of cognitive morality, students from the religious school resisted hypothetical temptation significantly more often than students from the secular school. Nonetheless, on the behavioral test of morality (i.e., the Maze test), students from the secular school cheated significantly less than those from the religious school. Guttman concludes that knowledge about a student's level of moral reasoning does not permit accurate prediction of actual cheating behavior. Students may be aware of moral norms and expectations but there is no guarantee that this awareness will result in an enactment of these norms. Despite this finding by Guttman, students apparently perceive religious beliefs to be a deterrent to cheating (Aiken, 1991).

Asendorf and Nunner-Winkler (1992) found that a stronger moral motive was associated with reduced cheating in a guessing game in which 6-year-olds were given the

opportunity to cheat when the experimenter left the room. Moral motive strength was assessed by examining the appropriateness of attributions for protagonists' actions in four pictures that portrayed a negative duty (i.e., not to steal sweets) and three positive duties (i.e., to share a drink with a needy child, to share an illegitimately won prize, and to help a needy child). Attributions were judged to be appropriate when negative emotions were attributed to protagonists who violated moral norms and when positive emotions were attributed to protagonists who conformed to moral norms. These attributions also had to be sufficiently justified.

Finally, religiosity did not predict cheating on mid-term and final examinations by medical students (Sierles, Kushner, & Krause, 1988). It is uncertain how religiosity was measured in this study.

The findings regarding religiosity/moral reasoning provide some additional support for the deficiencies of single stage models of moral behavior. Guttman (1984) found that the level of moral reasoning was higher in Israeli religious school children than in those who attend a secular school. He also found that this higher level of moral reasoning was associated with a greater ability to resist cheating on a hypothetical temptation to cheat on a test of cognitive morality. However, on the test of behavioral morality (i.e., opportunity to cheat on a Maze test), the students from the secular school cheated significantly less often than those from the religious school. Asendorf and Nunner-Winkler (1992) found that a stronger moral motive (i.e., the ability to make appropriate attributions for violating and conforming to moral norms) was associated with lower levels of cheating in a guessing game. In the Guttman and Sierles et al. (1988) studies, higher levels of moral reasoning and greater religiosity were not associated with lower levels of cheating, as might be expected with a single stage model of cheating. The Guttman and Sierles et al. findings suggest that cheating is not adequately predicted by

knowledge of religious/moral beliefs alone; an intervening construct such as moral disengagement may be necessary to link beliefs to actual behavior. The Asendorf and Nunner-Winkler findings that moral motive strength is negatively related to cheating is more consistent with a single stage model of cheating. The fact that the Asendorf and Nunner-Winkler findings were not as expected may be attributable to the fact that cheating was assessed in a game situation where students may not have felt a need to cheat. In other words, students may not have seen the game context as “an exception to the non-cheating rule,” and thus, their moral knowledge remained an accurate predictor of moral behavior *in that context*. The role of religiosity and moral knowledge with regard to academic cheating requires further investigation, particularly in light of the findings below that show that the presence of a school honor code (i.e., a formalized code of acceptable behavior) is associated with lower levels of cheating.

Academic Achievement. The third individual difference variable that will be considered is Academic Achievement. Academic achievement is an important consideration in the formulation of any model of student cheating. The importance of academic achievement to a model of student cheating is two-fold. First, students have certain grade expectations and goals. These goals and expectations may be formulated based on internal and/or external standards. A student’s grading standards may impact upon the decision to cheat or to refrain from cheating. Conversely, cheating may impact on (i.e., increase) a student’s “achievement.” Thus, academic achievement must be considered both in terms of which students “need” to cheat (high versus low achievers) and in terms of the achievement consequences of cheating behavior. These issues are considered briefly in the research that follows.

Jendrek (1992) found that over all achievement levels, 84% of students disagreed that under certain circumstances, cheating is justified; 92% disagreed with the statement that

cheating is justifiable in order to pass a course. She also found that with increasing grade point averages, students are more likely to perceive academic dishonesty to be a problem at their university even though they are less likely to actually observe cheating. Although higher academic achievers are more likely to perceive cheating to be a problem, they tend not to report it because they perceive the act of reporting to be tattling. These students, however, do not tend to remain indifferent to cheaters. As grade point average increases, students are more likely to express disapproval of cheating behavior to the cheater himself. High achievers are also less likely to endorse the notion of reporting a cheater as being worse than cheating itself or that reporting a cheating friend is as bad as the act of cheating itself. As stated by Jendrek, high academic achievers clearly do not condone cheating, but they usually do nothing to stop others from engaging in this behavior.

There is evidence to suggest an inverse relationship between academic cheating and grade point average (e.g., Bunn, Caudill, & Gropper, 1992; Scheers & Dayton, 1987). However, Leming (1980) found cheating to be unrelated to academic ability in general, except under high risk conditions, when high ability students were less likely to cheat than low ability students. Higher achieving students should be more likely to refrain from cheating under high risk conditions (i.e., where the probability of being caught is high) because they do not stand to gain from such behavior as lower achieving students.

Roberts and Rabinowitz (1992) examined the relationship of academic achievement to cheating through the use of scenarios about a fictional student, "Jack." Jack was depicted to have actually cheated in each of the scenarios. Respondents identified Jack's behavior as cheating fairly readily, but they were not as disposed to judge Jack as having done something immoral or that he should be punished. It was found that when Jack was portrayed as "less in need" (i.e., he had better grades), he was more often forgiven for cheating. It was surmised by

Roberts and Rabinowitz that Jack may have been perceived as less of a cheater under these circumstances because, as a good student, he did not truly need to cheat. As such, he wasn't really gaining as much from his behavior as would a poor student.

Overall, the findings relating to academic achievement indicate that high achievers tend to endorse a standard of noncheating. There is also evidence supporting an inverse relationship between cheating and academic achievement. There is not enough information, however, to determine the causal direction of this relationship. It must still be determined whether one's achievement level causes cheating or vice versa. One hypothesis is that higher achieving students refrain from cheating because, again, they potentially have less to gain and more to lose by cheating. An alternate hypothesis that is more in line with the proposed moral disengagement model of cheating is that students who rely heavily on moral disengagement are more likely to cheat, and in turn, are more likely to have lower levels of achievement. Perhaps the same discipline that would help a student to face the self-censure normally associated with cheating would also be useful in increasing academic achievement.

Summary of Individual Difference Predictors of Academic Dishonesty.

To summarize the relevant findings regarding the individual difference variables, it could be said that there is evidence that anti-cheating beliefs vary between students and teachers and between cultures. There is also evidence that there is a fair degree of commonality in cheating beliefs on these same dimensions. The findings regarding the relationship of religiosity/moral reasoning are not entirely consistent. However, there is evidence to suggest that neither of these alone is an adequate predictor. It was hypothesized that moral disengagement might be the additional mediating construct in the relationship between cheating and religiosity. Finally, further work is need to determine the exact nature of the relationship between academic achievement and academic dishonesty.

Situational Characteristics as Predictors of Academic Dishonesty

A major trend in the cheating literature has been to investigate situational factors thought to be associated with academic dishonesty. Situational factors can include a wide array of elements within the academic milieu. Since the number of situational variables examined in the cheating literature is so vast, only select findings will be presented. This discussion of situational factors will focus on six groupings of variables: test-related factors, personal situational factors, instructor-related factors, institutional factors, external pressures, and cost-benefit factors. Again, the purpose of discussing these situational variables is to provide evidence that cheating is situationally determined, and that a dual stage moral disengagement model is more appropriate for the prediction of cheating because it is based upon situational exceptions to the "No Cheating" rule.

Test-Related Factors. The first grouping of the situational predictors of cheating are test-related factors. One factor related to test-taking, test importance, was examined by Houston (1977). He found that the importance of the test was not a reliable predictor of actual cheating. The reason for this finding was that all subjects tended to rate the importance of the test as high, which accounts for the fact that cheaters were indistinguishable from noncheaters on the basis of test importance ratings. The observed uniformly high ratings are not surprising because the test in question was a regularly-scheduled class mid-term examination.

A second test-related factor that has been considered in the cheating literature is opportunity to cheat. This factor addresses features of the testing situation that make it easier, and thus more desirable, for a student to engage in cheating. The research on opportunity to cheat is presented here in order to support the notion that cheaters often do not intend to cheat in advance (i.e., they do not have principles that tolerate cheating), but rather, they often cheat

because they find themselves in a situation in which there is an opportunity to cheat with potentially great rewards and few negative consequences.

Opportunity to cheat is built into some forms of assessment. For example, Marsh (1988) concluded that students who were given a take-home mid-term examination had cheated more than students who had taken an in-class proctored examination. His conclusions were based upon the take-home group's higher scores on the mid-term and lower scores on an unannounced follow-up examination a week later. Members of the take-home group stated that they had prepared less than they would have if they were preparing for an in-class test.

Opportunity to cheat was also a factor in the Karlins, Michaels, and Podlogar (1988) investigation of cheating in an undergraduate business course. The evaluated task was a brief library research assignment which required students to read, summarize, and compare five management-related articles or books. This project had a significant, negative effect on students' grades only if it was late, not done, or not done correctly. Of students completing the assignment, slightly over 3% of the papers were deemed to have been plagiarized.

This 3% figure is far below most other estimates of the frequency with which cheating is estimated to occur. However, as the authors themselves pointed out, the task was relatively simple, and therefore, many students may have felt it not to be worth the risk of cheating. Additionally, plagiarism is not the only possible manner of completing the assignment dishonestly.

Davis, et al. (1992) found that students believe that cheating can be deterred by decreasing the opportunity to cheat within the classroom. For example, they believe that cheating is less likely when students are separated by empty desks during exams, when proctors walk up and down classroom aisles, and when teachers closely monitor students

during exam. Large classes in confined classrooms in which only one form of a multiple-choice test is used or in which a test is reused in subsequent academic terms have also been associated with higher levels of cheating (Houston, 1976). Slanted classrooms, such as those present in large lecture halls, also encourage cheating (Moffatt, 1990). Use of take-home tests, multiple-choice tests, and single forms of a test were also believed by large numbers of students in Aiken's (1991) research to promote cheating, as was sitting in the back of the classroom during examinations.

Shaughnessy (1988) found that most students do not plan to cheat in advance but, faced with a direct opportunity to cheat, they will take advantage of the situation. Factors that increase the opportunity for students to cheat are poor student monitoring during exams, use of exams that students perceive to be unfair, and professors' nonchalant attitudes regarding student cheating (Genereux and McLeod, 1995). Use of essay exams with widely spaced seating was associated with lower levels of cheating (Genereux and McLeod, 1995).

Roberts and Rabinowitz's (1992) study that used the scenarios of the fictional student, Jack (see above), attempted to assess whether students' ratings of the acceptability of cheating would be influenced by the intentionality of the cheater (i.e., whether the cheating in the scenario was pre-meditated or done "on-the-spot"). Jack was labeled as behaving more immorally when he planned in advance to cheat than when he made the decision on the spot. However, even when Jack's cheating was depicted as premeditated, students still showed no strong tendency to judge his actions as immoral or to state that he should be punished.

The Roberts and Rabinowitz (1992) findings regarding the intentionality of the cheater are related to the findings regarding the opportunity to cheat. The research presented in this section is supportive of the situational specificity of cheating behavior.

The evidence suggests that cheaters often do not enter test-taking situations with the intention to cheat. It appears to be a case of academic “carpe diem,” in which students tend to seize upon an opportunity that is “too good to pass up.”

These findings on the test-related factors that are associated with cheating should be encouraging to those functioning in a teaching capacity because they show clear evidence that there a number of methods for controlling cheating within an instructor’s direct control (e.g., diligent proctoring of examinations, use of multiple forms of an examination, administering examinations that are perceived as fair). In this regard, Shaughnessy’s (1988) finding that most students do not plan to cheat in advance, but rather, they do take advantage of an opportunity to cheat when it arises is even more encouraging for instructors who are concerned with the prevention of cheating. Once again, Shaughnessy’s find is consistent with Bandura’s (1996a, 1996b) work on moral disengagement and with the proposed model in the present research. Both Bandura and the proposed cheating model hypothesize that cheaters and noncheaters do not hold different moral standards. However, cheaters are more likely to set aside their moral standards in situations that they judge to be exceptions to their general anti-cheating rule (e.g., inadequate proctoring during an examination, use of only a single form of an examination for several class periods).

Personal Situational Factors. The second grouping of situational factors that will be discussed are the personal situational factors. Although personal, or individual difference, factors were considered above as distinct from situational factors, a number of studies within the cheating literature can be conceived of as examining personal situational factors, or factors within the educational context that relate to the individual. Personal situational variables are person-centered factors that are context-dependent.

One such personal situational variable, course difficulty, may have a number of different manifestations. For example, Barnett and Dalton (1981) discuss faculty ignorance with regard to the amount of work assigned to students. They state that insufficient time to complete reading and assignments may cause stress in students, which in turn may lead to the adoption of more lenient standards of cheating. Some students acknowledge cheating "only if they don't know the answers" (Davis & Ludvigson, 1995) or "if the class is too hard." Course difficulty was cited as a factor in cheating by 58% and 97% of students from two universities in a study by Aiken (1991).

Cheating behaviors studied over the course of 30 years provided the finding that the most often-cited reason for cheating was fear of failure. Cheating was perceived to be increasingly necessary, and it was viewed as most needed in mathematics and science (Schab, 1991).

A second personal situational variable, exam preparedness, has been shown to play a role in cheating. Exam preparedness is considered here as a personal situational variable because it is personal in that it relates to personal perceptions of readiness to take an exam, and it is also situational in that "readiness" is a state that is relevant to a given examination.

Exam preparedness was a factor in the Davis and Ludvigson (1995) study. Approximately 14% of the students in this study admitted to "not usually studying," and nearly another 14% felt that they were unable to study due to job-related commitment. Aiken (1991) found that in samples of students from two universities, 83% and 97% of students indicated that cheating is more likely when students are underprepared for examinations. Teachers and students agree that poorly budgeted study time and a desire to avoid effort are likely to influence students to cheat (Evans & Craig, 1990).

Shaughnessy (1988) found that students attributed their cheating in high school mainly to insufficient time to study and to personal laziness. They also were likely to attribute their cheating in college to insufficient time to study and personal laziness, but they found course difficulty to be an additional factor in their cheating. He also concluded that self-reported cheating appears to decrease in frequency from high school to college. This finding is problematic because the observed decrease in frequency may merely reflect an increased awareness of social desirability. High school students may not yet have had time to develop a suspicion of survey instruments assessing behavior that is not socially desirable and thus may have responded more honestly.

In a related finding, Houston (1976) found that distraction-(i.e., irrelevant experimenter questions) during learning of a free-recall list of words is associated with greater cheating than in an undistracted learning condition. Clearly, distraction during the learning phase would impact upon preparedness during testing. The external validity of these findings may be affected by the fact that a free-recall task was used rather than a standard examination or class assignment.

In the present research, Exam Preparedness was included in the model as a predictor of moral disengagement and subsequent cheating. Exam Preparedness was selected because it incorporates some of the other findings presented above in this section. The degree of exam preparedness is more generic in that one could be unprepared for an examination for any number of reasons, such as insufficient time to study, lack of motivation to study, or course difficulty.

A third personal situational factor associated with cheating is the existence of a personal relationship between givers and receivers of illicit information. The most common reason cited for allowing another students to copy one's work was that the person seeking the

illicit information (the "seeker") was a friend (Davis et al., 1992). Other reasons included the expectation of similar help from the seeker in the future, physical characteristics of the seeker (e.g., bigger, physically attractive), and feeling sorry for the seeker (Davis et al, 1992).

The impact of friends on cheating was incorporated into the present research in the Moral Disengagement scale. Possible friend-related justifications for cheating included viewing cheating as a way to help a friend improve exam performance or a way to do a favor for a friend. Cheating could also potentially be excused if friends also cheated or if they pressured one to cheat.

A fourth personal situational factor that has been associated with cheating is anticipated success/failure or degree of confidence on the experimental task. Students are more likely to cheat after success feedback than after failure feedback (Houston & Ziff, 1976). The authors account for this higher incidence of cheating by suggesting that subjects' desire to avoid failure after a prior success experience was stronger than their desire to avoid failure after a prior failure experience.

Houston (1977) found that for all levels of anticipated success on a mid-term examination, answer copying was greater when students were more confident about the level of success they anticipated on the exam. Also, regardless of students' level of confidence in their estimates of success on the examination, answer copying was greater when students expected to perform better on the exam. Prediction of cheating (i.e., answer copying in this case) was even more accurate when it was based upon a combination of both anticipated success and confidence in the level of anticipated success. Anticipated Success and Confidence in Level of Anticipated Success both failed to show a significant correlation with actual exam performance. Cheating also did not show a significant correlation with actual performance on the examination.

Under conditions of either high, moderate, or low-success feedback on a free recall task, Houston (1978) found a curvilinear relationship between cheating and anticipated success on the task. Cheating was the greatest under conditions of moderate-success feedback.

Vitro and Schoer (1972) observed the greatest amount of cheating under the combined conditions of low probability of success (i.e., subjects were told that performance was poor on a pretest), low risk of detection (i.e., instructor left the room), and high test importance (i.e., subjects were told that the test was very important). Probability of success was judged to be the most influential in cheating on the experimental task. The authors recommend much closer examination of this variable in the literature, a recommendation which is heeded in the present research. The present research examines the relationship of Academic Self-efficacy (i.e., the degree to which students feel competent at academic tasks) to moral disengagement and subsequent cheating.

Cheating was also associated with students' academic achievement goals. Goal GPA, or the grade expectation held by students, was found to be a significant predictor of cheating, with greater cheating occurring in those with a low goal GPA (Genereux & McLeod, 1995). Students with the greatest discrepancy between the grade students reportedly expected to attain and the grade that they actually attained were more prone to cheating in their self-grading of weekly class quizzes (Tittle & Rowe, 1974). Students who needed to cheat the most, in fact did so, which the authors interpret as evidence that "the greater the utility of an act, the greater the potential punishment required to deter it (p. 48)."

Millham (1974) found that subjects were significantly more likely to cheat on a simulated test of "intelligence" after failure feedback (i.e., being told they had performed below the norm) than after success feedback (i.e., being told that their performance had met the

norm). Students who cheated after failure feedback were significantly higher in Need for Approval than those who did not cheat following failure feedback. Millham views the cheater as seeking to avoid censure and social disapproval rather than seeking to gain social approval. In other words, cheating might be conceived as related to a Need for Disapproval-Avoidance rather than a Need for Approval.

Overall, the findings relating to personal situational variables once again make the strong point that situational factors influence students' decisions to cheat. Students report cheating for such varied reasons as helping a friend in need of passing a course, because they are insufficiently prepared for an examination, because they feel at risk for physical harm if they do not provide the requested information during a testing situation. None of these personal situational factors in any way should preclude an individual from holding moral principles that are consistent with moral norms; they arise on a situational basis. There is no reason to believe that an individual who feels at risk for physical harm if s/he fails to provide answers to certain test questions should be any less likely to believe cheating is morally unacceptable than anyone else. These findings provide further support of Bandura's notion that those who engage in behavior that is contrary to the established moral norms do not necessarily hold a different set of standards; they merely find elements of the situation that allow them to temporarily set aside the moral standards that they do hold.

Instructor-Related Factors. A third group of situational predictor variables within the cheating literature are instructor-related variables. Among these, instructor vigilance against student cheating and instructor fairness were found to be consistently rated as factors that influence student cheating (Genereux & McLeod, 1995). These authors note that cheating is particularly likely when instructors are perceived to be disinterested in student cheating in combination with a situation in which students feel pressure to achieve high grades.

Instructors who present interesting material are also less likely to experience a problem with student cheating (Genereux & McLeod, 1995; Moffatt, 1990). Students are more likely to justify cheating when they perceive their teachers to be incompetent (Evans et al., 1991). Cheating may also be done as a means of revenge on a professor (Moffatt, 1990).

Nearly half of all students in Aiken's (1991) study indicated that they are less likely to cheat when the instructor is friendly and considerate, and more than 60% of all students indicated that they are less likely to cheat when they are graded fairly. Informing students of test format and content prior to an examination was strongly endorsed as a means to reduce cheating, as were professor appeals to students' moral and ethical principles (Aiken, 1991). It is notable, however, that 66% of students from a religious college endorsed this idea, while 38% of students from a non-religious college did so.

Graham et al. (1990) discuss their perceptions of students' view of classroom activity as a reciprocal process. They contend that cheating becomes an option in the event of teacher unfairness because they consider unfair treatment by teachers as a violation of the rules of the classroom. This first violation "deserves a second," namely, violation of the rules of academic honesty. Graham views this reasoning as clear evidence that students cheat for situational reasons.

Evans et al. (1991) examined students' attributions for cheating (i.e., cheating attributions). These attributions involved situational factors to a large degree. They assessed high school students' tendencies to attribute cheating to teacher characteristics, classroom climate, and to personal characteristics or circumstances. Students in this study tended to believe that teacher incompetence was a just cause for cheating. Keeping in mind that German students held the most liberal standards for classifying behavior as cheating, Evans et al. also found that German students were the least likely to attribute cheating to any of the

three assessed characteristics. American and Costa Rican students strongly endorsed each of these factors as explanations of cheating. For example, American and Costa Rican students were more likely to attribute cheating to teacher is unfriendliness, uninteresting coursework, unclear penalties for cheating, participation in numerous extracurricular activities, ignorance of the rules of cheating, or having friends who cheat.

In Roberts and Rabinowitz's (1992) study using scenarios about the fictional student, Jack (see above), students were less likely to state that Jack should be punished under conditions of high provocation (i.e., teachers' unreasonable demands or unfairness). Opportunity to cheat (e.g., no proctor supervision during an examination) was not a significant predictor of whether Jack was judged a cheater, whether his behavior was immoral, or whether it was felt that Jack deserved punishment. Further, when Jack was judged to be a cheater who, indeed, had acted immorally, students were less likely to state that they would behave similarly in the same scenario.

Graham et al. (1990) most clearly summarize the instructor-related findings in the cheating literature. Their view of classroom activity as a reciprocal process is very useful with regard formulating an explanation of cheating. Graham et. al maintain that some teachers violate the rules of the classroom by being disinterested in the material they present to students, not providing clear guidelines on grading expectations, grading unfairly, being rude or unfriendly, failing to monitor examinations, and generally not teaching in a competent manner. The violation of the rules of the classroom allows students to react with violation of the rules of academic honesty, which Bandura (1991) might say is similar to the way that an individual responds to features of a situation by disengaging his/her moral standards.

The above evidence indicates that students place a fair share of the blame for their own cheating on their teachers. As such, teacher-related situational exonerations for cheating were considered heavily in the present research. The Moral Disengagement scale used in the proposed model (Appendix A, Part IV) included a number of items that examined students' acceptance of cheating exonerations that focus on a perceived instructor inadequacy. Of the 32 items in the scale, 10 items measured excuse-acceptance based upon teacher blame. The teacher-related items from the Moral Disengagement scale of the research questionnaire are presented in Table 2.

Table 2: Teacher-related Cheating Exonerations in the Moral Disengagement Scale

| ITEM NUMBER | TEACHER-RELATED CHEATING EXONERATIONS |
|--------------------|---|
| 7 | Teachers don't "deserve any respect" |
| 8 | "If students cheat, it's mainly the teacher's fault." |
| 9 | "Teacher is unfair" |
| 10 | Cheating is a good way to "teach a lesson" to a teacher |
| 13 | "If students are not disciplined [by the teacher], they should not be blamed for cheating." |
| 15 | Teacher "assigns too much work" |
| 22 | Teacher "doesn't care if students learn the material or not" |
| 23 | Teachers are "very strict about grading" |
| 24 | Teacher leaves the room during a test |
| 31 | Teacher "doesn't teach well" |

Institutional Factors. A fourth group of situational predictors are institutionally-related, among which is the presence/absence of an institutional honor code. There have been a significant number of studies in the recent cheating literature relating to the relationship of honor codes to academic dishonesty. Honor codes are particularly important for the present purposes if they are viewed as a socially supported system of moral guidelines. It will be recalled that social support for behavior, delinquent or otherwise, is of great importance within Social Cognitive Theory. For the purposes of the present research, an attempt is made here to find evidence that social support for cheating (i.e., Peers' Cheating) may influence students' decisions to suspend their anti-cheating beliefs.

There is conflicting evidence regarding the relationship between the presence of an honor code and cheating. McCabe and Trevino (1993) operationalized honor code as the existence of the following criteria: the presence of an explicit (rather than implicit) code, unproctored examinations, the requirement that students take an honor pledge, a policy of nontoleration (i.e., students were accountable for others' cheating if they did not report cheaters), and the presence of some type of judiciary body to deal with suspected cheating incidents. In this study, self-reported cheating was less common in schools with honor codes than in those with no such code. Poor understanding of policies regarding academic honesty, certainty of being reported, the existence of severe penalties, and perceptions that one's peers were cheating were also found to be predictors of academic dishonesty. Common acceptance and understanding of policies pertaining to academic honesty were found to impact significantly upon students' perceptions of peers' cheating. Thus, the presence of an honor code is important, although other contextual factors are also important in the prediction of cheating.

McCabe and Bowers (1994) also found lower levels of cheating in schools with honor codes. They observed lower levels of all examined forms of cheating behavior. Notably, this study included only male subjects.

This evidence that honor codes, really a set of social norms, appear to have an inhibiting effect on cheating is consistent with a Social Cognitive approach to deviant behavior. Previous evidence that socially supported deviant behavior is more likely to occur (Michaels & Miethe, 1989; Bandura, 1996a) is consistent with these honor code findings. The authors concluded that the task for administrators, then, is to create an institutional climate in which cheating loses its social desirability. The necessary caution with these findings, however, is that lower levels of observed self-reported cheating may really be an indication that the cheating is only *reported* less often within the context of an honor code because it *is* less socially acceptable.

One of the more common features of honor codes is the policy of unproctored examinations (Nuss, 1996; Pavela & McCabe, 1993). In the study of medical students by Sierles, et al. (1988), the use of unproctored examinations was associated with a significantly greater incidence of self-reported cheating and observed cheating on mid-term and final examinations. The unproctored examinations took place within the context of an established honor code. However, the honor code had only been in existence for a few years, which may be related to the degree to which it has been adopted by faculty.

McCabe (1993) notes that a common characteristic of academic honor codes is that students play a more active role in the disciplinary process that accompanies suspected incidents of cheating. He hypothesized that faculty should be more willing to report incidents of suspected cheating in the presence of an honor code because specific disciplinary procedures have been established to deal with such incidents at the university level. However, McCabe

states that even when a school has a strong, long-standing honor code tradition, faculty are not likely report incidents of cheating. In fact, McCabe states that faculty at non-code schools are nearly twice as likely to report cheaters. Faculty often prefer to handle the matter directly, without administrative intervention. The author points out that simple establishment of an honor code does not guarantee its use. Along these same lines, Nuss (1996) points out that honor codes lose their effectiveness unless students, as well as faculty and administration, adopt them as their own.

One of the more controversial issues surrounding the adoption of a school honor code has been a policy of nontoleration (Fass, 1986) that accompanies many honor codes. Nontoleration requires that any instance of observed cheating be reported by students or the cheating witness will also face disciplinary consequences. Pavela and McCabe (1993) state that appealing to students' sense of personal integrity is often ineffective in gaining students' cooperation in reporting cheating because many students view the enforcement of cheating regulations as the responsibility of faculty. They also are hesitant to report cheating in many cases because cheating itself is often viewed amorally by students, so that they would not be likely to report another student for doing something that does not conflict with their personal values (Pavela & McCabe, 1993).

Beatty (1992) questions the wisdom of training students to be informers in the name of academic integrity. He raises the issue of whether the benefits derived from requiring students to report cheating by their friends and classmates will outweigh the potential damage to the social relationships that are also an integral part of the academic milieu.

The social acceptability of cheating is a second, related institutional factor that has received attention in the literature. The degree of social support for cheating has many manifestations in the literature. For example, membership in Greek organizations in college

provides social support, and it has been associated with higher incidences of academic cheating (Moffatt, 1990). Members of Greek organizations were also more likely to mention incidents of observed cheating to other students, while nonmembers were more likely to ignore observed cheating. In a related finding, freshman medical students were less likely than senior students to feel responsible for others' cheating (Simpson, Yindra, Towne, & Rosenfeld, 1989).

Another manifestation of the social acceptability of cheating was investigated by Greene and Saxe (1992). They discuss the *uniqueness bias* in terms of student cheating. The uniqueness bias, according to these authors, is the tendency to believe that one is uniquely good, that one is above average in "goodness", or at least no worse than others. Cheating is excused by students who possess a uniqueness bias because they are able to perceive everyone else as cheating more than they do. Notably, subjects in their research reported high levels of cheating for both themselves (81%) and their classmates (99%). Subjects also perceived the type of cheating in which they themselves engaged to be less serious than that of their classmates. Others were perceived by subjects to derive greater (grade) benefit from cheating than they themselves did.

Greene and Saxe also discuss lateral comparison as a means of rationalizing academically dishonest behavior. Students compare themselves to those whom they perceive to cheat as much as they do or more. Lateral comparison can be seen as similar to Bandura's notion of advantageous comparison (e.g., Bandura, 1990). Belief that others cheat frequently has been associated with higher levels of self-reported cheating (Genereux & McLeod, 1995).

Greene and Saxe (1992) note that it is not yet possible to separate students' justifications for cheating from the causes of cheating. They state that further research is needed to determine whether students cheat because everyone else does, or whether they

say that other students cheat in an effort to rationalize their own cheating. The consideration of perceptions of others' cheating within the present research model addresses this question.

The perception that others cheat and actually observing others cheat is directly related to students' tendency to report having cheated in college (Bunn, Caudill, & Gropper, 1992). Evans and Craig (1990) observed a high degree of consensus among teachers and students that having friends who cheat is related to higher levels of cheating.

A third type of institutionally-related predictor of student cheating concerns administrative response to academic dishonesty. Kibler (1994) suggests the active promotion of academic integrity rather than reactively relying on disciplinary consequences for violations of the rules regarding cheating. He advocates helping students to develop values that are inconsistent with cheating.

Students' decision to cheat may also be influenced by an institutional climate in which faculty are encouraged to deal with cheating on their own, without intervention from university administration (McCabe, 1993; Aaron and Georgia, 1994). For example, if a faculty member decides that the penalty for cheating on an examination is failure (either for that examination or for the course), this penalty is not likely to have a strong deterring effect on the student who already was nearly certain of failing without cheating (Nuss, 1996). Established university-level procedures might be useful in such cases. Aaron and Georgia (1994) found that many faculty members are unaware of established disciplinary procedures pertaining to cheating. It is also not the norm for faculty to define cheating for their students or for them to discuss the consequences of cheating (Aaron & Georgia, 1994). Finally, many universities admit that addressing the issue of student cheating is not a priority (Aaron & Georgia, 1994).

In summary, the institutional-related factors that have been associated with cheating highlight the important role that social support can play in the development of behavior. There

is some evidence of the association of school honor codes with lower levels of cheating. Honor codes are a set of socially supported standards of conduct that students often make a formal commitment to uphold, and students often participate in the enforcement of the honor code. Participation in Greek organizations has also been associated with higher levels of cheating, and in fact, many Greek organizations have highly structured procedures for "sharing" relevant coursework with their members (Moffatt, 1990). The acceptability of cheating within an institution's social climate has also been related to support of the uniqueness bias, in which students excuse their cheating due to their belief that they cheat less than, or at least no more than, other students. Social support for cheating is also perceived to be greater when students see others engage in cheating without consequences (Evans & Craig, 1990). Failure to have clearly established guidelines on the consequences of cheating that faculty are willing to enforce creates an institutional climate that may unwittingly be perceived as supportive of cheating.

Previous evidence has shown that when deviant behavior is perceived as having social support, it is much more likely to occur (e.g., Michaels & Miethe, 1989). It is also held by Social Cognitive theorists that deviant behavior may be maintained through social reinforcement. It is for this reason that perceived social support of cheating is assessed in two ways in the present research model. First, students' perceptions of the degree to which their peers cheat is included in the proposed model. Secondly, tolerance for cheating is also included in terms of students' perceptions of the consequences that would result if a student were to cheat in his/her school.

External Pressures. A fifth class of situational predictors of cheating relate to pressures the student faces outside the immediate classroom environment. Competition for admission into graduate programs, scholarships, and eventual employment are cited by

Maramack and Maline (1993) as the most important causes of student cheating. The need to remain competitive with students who cheat was also a factor for approximately one-third of the students in Aiken's (1991) research. Students in the Davis and Ludvigson (1983) study admitted to cheating so that their GPA "looks better to prospective employers." A full 29% of students in the Davis and Ludvigson research claimed to study, but they admitted to cheating to "enhance their score." Dependency for financial support on grades and perceived dependence of long-term goals on grades were also found by Genereux and McLeod (1995) to be significant predictors of both planned and spontaneous student cheating. Over 90% of all students in Aiken's (1991) study believe that cheating is encouraged by overemphasis on grades, rather than on self-improvement through learning.

It is interesting that nearly three-quarters of the subjects in the Sutton and Huba (1995) research indicated that cheating is never justified, even though this belief is inconsistent with the amount of self-reported cheating. Cheating to improve one's grade was considered acceptable by nearly 13% of students. Cheating to keep a scholarship, pass a course, remain in school, or graduate was considered acceptable by approximately one in five students.

Parental pressure to achieve good grades is a commonly cited reason for engaging in academic cheating (Barnett & Dalton, 1981). Evans and Craig (1990) observed a high degree of consensus between students and teachers regarding the positive relationship of cheating and parental pressure to achieve academically. Participation in athletic or extracurricular activities was also believed to be influential in student cheating. Sternberg (1996) suggested that participation in athletic and/or extracurricular activities may make cheating more likely when it demands too much of a student's time that might otherwise have been spent studying.

It can be seen from these studies that the external pressure to succeed is a strong motivation to cheat for many students. External pressure to maintain scholarships, obtain a

good job following graduation, or simply the desire not to disappoint one's parents are among the external factors that may motivate students to cheat. These external situational influences operate in the same students who endorse the statement that cheating is never justified (Sutton & Huba, 1995). This group of studies provides further support for Bandura's (1996a, 1991) notion that engaging in deviant behavior does not imply the absence of moral principles, but rather that those principles are deactivated in certain contexts.

Given the evidence of the important role of external pressures in student cheating, external pressures were incorporated into the present research model in two ways. First, the Moral Disengagement scale (Appendix A, Part IV) contains items assessing students' endorsements of cheating exonerations when:

- They are in danger of failing a class
- Their parents become angry if they receive a low grade
- Parents expect too much from them in school.

The second way in which external pressures are incorporated into the research model is in terms of Parental Achievement Goals. Parental Achievement Goals reflect the lowest (perceived) grade with which a student's parents would be satisfied. If students are aware of their parents' academic expectations of them, they may feel pressured to meet that standard. For some students, the pressure caused by the need to meet parents' standards may become represent a situational exception to their anti-cheating beliefs.

Cost-Benefit Factors. A final grouping of situational predictors is related to the perceived costs and benefits of engaging in cheating. As expected, students are more likely to cheat when the expected consequences for doing so are mild or when they believe that they will not be caught. Davis, et al. (1992) found that the most popular student-suggested punishment for cheating was being told to "keep their eyes on their own paper (p. 19)." Other

students believed that removal of a student's paper or allowing the student to begin the test over were appropriate disciplinary measures. Still others condoned failing grades for students caught cheating. The threat of a severe punishment (university expulsion as opposed to a warning) was reported to be a deterrent of both planned and spontaneous cheating (Genereux & McLeod, 1995).

Under conditions of perceived low risk of detection, students anticipating success on an academic task are more likely to cheat than students anticipating failure (Houston, 1977). Students anticipating failure display steady, moderate levels of cheating, whether the risk of detection is high or low (Houston, 1977). Threats of increased likelihood of detection of cheating are more likely to deter students who anticipate success on an academic task. These threats do not hold the same deterrent power with students who anticipate failure (Houston, 1977).

A major reason that students cite for refraining from cheating is the fear of being caught (Moffatt, 1990). Concerns with social disgrace, expulsion from college, and derogatory information being put on their permanent academic record were among the deterrents cited by students in Moffatt's study. Other students reported that having been caught in the past was the reason for their present choice to refrain from cheating.

Graham et al. (1994) also noted that students commonly report refraining from cheating because of their fear of being caught. This fear is apparently unfounded in many cases (Graham et al., 1994; Moffatt, 1990). Graham et al. state that only 9% of faculty reported deducting points from a student's exam, failing the student, or some other type of negative consequence when cheating was observed. As one might expect, the type of cheating in which students engage is affected by the perceived risk of detection associated with that form

of cheating. Students are far more likely to collaborate on a homework assignment than to use crib sheets during a test (Sisson & Todd-Mancillas, 1984).

Threats are apparently effective in some cases, however, because Tittle and Rowe (1974) found that cheating on 8 weekly self-graded quizzes was more effectively deterred by the use of threats than by moral appeal. The threat took the form of an announcement that there would be a(n) (unspecified) penalty for cheaters. The moral appeal took the form of a reminder to students that they were being trusted to be honest in grading their quizzes. A control group received neither a moral appeal or a threat. Reliance on trust that students would not cheat in grading their exams (i.e., for students in the control condition) was ineffective, as was reliance on moral appeal. Threat of detection and punishment was the only effective method of deterring cheating.

Of key importance in students' decision to cheat is the expected benefit, or instrumentality, of such behavior. Houston (1978) demonstrated empirically that students' perceptions of the utility of cheating can influence their decision to engage in academic dishonesty. Under conditions of high, moderate, and low-success feedback on a free-recall test, a curvilinear relationship between cheating and anticipated success was observed. This relationship was moderated by the degree to which students viewed cheating (i.e., copying words that were "accidentally" exposed) as a means to improve their performance. Subjects who were almost certain that they would fail at the experimental task (i.e., those in the low-success feedback condition) did not perceive cheating to be a useful means of attaining success. Those in the high-success feedback condition felt very certain of success, and thus did not view cheating as significantly able to add to their chances for successful performance on the experimental task. It is only the subjects in the moderate-success feedback condition

who perceived cheating as potentially instrumental in their success on the experimental task; these were the only subjects who were not fairly certain of their chances for success.

In summary, a number of cost-benefit factors have been associated with cheating. The threat of detection and the fear of severe punishment are two major deterrents of cheating. Fear of punishment was a deterrent despite the low frequency with which cheating produces serious consequences for students (Graham et al., 1994). The instrumentality of cheating also was found to be a determinant of cheating behavior (Houston, 1978). Students who are either very certain of success or very certain of failure are less likely to cheat because they do not perceive cheating to be able to significantly improve their performance. Students who are uncertain of their chances of success are the most likely to cheat because they believe that there is a possibility that cheating may improve their performance.

In terms of the present research concerns, the cost-benefit findings suggest that the threat of detection and the threat of severe punishment may be factors that could influence an individual's tendency to morally disengage and subsequently cheat. Students who believe that there is minimal risk of detection and that there would be minimal consequences for cheating may be more inclined to morally disengage, which would make them more likely to cheat. This hypothesis is tested in the present research.

Summary of Situational Predictors of Academic Dishonesty.

Six groupings of situational predictors of academic dishonesty were discussed: test-related factors, personal situational factors, instructor-related factors, institutional factors, external pressures, and cost-benefit factors. The studies that were reviewed present a consistent pattern of evidence that is situationally influenced. Evidence of situational specificity in the decision to cheat is supportive of the proposed research model, which attempts to specify some of the situational exceptions to the "No Cheating" rule.

Measurement Issues

The fourth main section deals with some of the key measurement issues that are present in the recent cheating literature. As is the case with most socially undesirable behaviors, accurate measurement of the amounts and types of cheating is an ongoing problem. An analysis of the limitations of three types of cheating measures will follow. Discussion will be confined to the self-report, behavioral, and probabilistic types of cheating measures. This section will conclude with a rationale for the selecting a self-report methodology for the present research.

The Limitations of Self-Report Measures.

The key methodological concern within the cheating literature is that a large portion of the investigations in this area have relied upon self-report questionnaires, partly out of necessity and partly out of convenience. This feature of the research alone can be hypothesized to have had a substantial impact upon the conclusions drawn regarding academic cheating.

The reliance upon self-report of cheating behavior is subject to the same cautions as the use of self-report in any area of inquiry, particularly when the behavior(s) being measured are considered by many to be socially undesirable (e.g., misuse of controlled substances, tendency to engage in racist or sexist behavior). One of the clear dangers of such heavy reliance on self-report in the cheating literature is the potential of underestimation of the occurrence of the measured behavior due to subjects' desires to maintain a favorable public self-image. The assurance of anonymity can alleviate this concern to some degree because with anonymous questionnaires, clearly, no individual subject's responses can be traced to its source. However, completion of research questionnaires on behaviors that are commonly perceived to be socially undesirable will also activate various self-cognitions. As such, even

though public self-image can remain fairly intact with the assurance of anonymity, private self-image may be affected as a result of completing the research questionnaire. It is necessary to consider whether the activated private self-concept will be that of a cheater or a non-cheater as a result of the very completion of a cheating questionnaire. Activation of a private self-concept as a cheater may impact upon the final responses given to questionnaire items.

While it is not necessary that one's self-concept be so black and white (i.e., either "cheater" or "non-cheater", rather than placing oneself somewhere along a hypothetical cheating continuum), the point remains that the very act of completing a questionnaire regarding a socially undesirable behavior creates self-cognitions that will be likely to impact upon self-esteem. If one arrives at a favorable self-concept as one considers one's standing within the relevant domain of undesirable behavior, then self-esteem should remain intact. If, on the other hand, one's self-concept is not favorable in the behavioral domain being assessed, then self-esteem is expected to suffer. It might follow, then, that subjects will report the examined behaviors in such a way as to allow self-esteem to remain intact, which is a potential source of error with the use of self-report instruments.

A second potential source of experimental error with the use of self-reports pertains to subjects' frame of reference within which they make their reports of cheating. Depending on the way in which the questionnaire is designed, subjects may be more or less likely to cognitively activate personal knowledge of cheating behavior. For example, in the Malarkey and Aiken (1986) work on testing practices, little cheating was reported by students; in fact, 60% expressed a belief that they observed *no* cheating. This report of non-existent cheating is not typical of the literature as a whole. One might hypothesize that this finding is due to the fact that the Malarkey and Aiken questionnaire contained only a single question pertaining to cheating. Students' frame of reference was likely one that focused on the general

characteristics of exams at their university (e.g., type of exams given, adequacy of time given to complete exams, tendency of instructors to allow students to keep graded exams). Given this single question relating to cheating embedded within a larger questionnaire context of items pertaining to testing practices, students probably did not tend to activate their declarative knowledge (Evans and Craig, 1990) about cheating to the same degree that they might have when completing a questionnaire concerned only with cheating. This tendency, again, points to another way in which self-reports of cheating behavior may be biased in favor of underestimation. Failure to activate knowledge about this socially undesirable behavior can perform an ego-protective function or it can simply be the result of access failure (i.e., failure to access the appropriate cognitions.)

Rate of questionnaire return is a related source of cheating underestimation observed in the literature. Although not strictly a self-report issue, the problem of a low rate of return is a general concern within the area of survey research. As expected, the method of administration can have a significant impact on the actual number of questionnaires returned by potential subjects. For example, a fair number of cheating studies employ remote questionnaire administration (e.g., placing the questionnaire in students' mail boxes) to large-scale samples, sometimes administered to several thousand potential subjects (e.g., Aidala & Greenblat, 1986). Low response rates are common under such circumstances.

When response rate is low, the gathered sample may not be representative of the population about which the researcher seeks to generalize, even though the final sample sizes in some of these studies are often fairly large. The potential does exist that only the more conscientious students will respond to remotely administered questionnaires. By extension, then, the same students who are conscientious enough to return their questionnaire may also

the ones conscientious enough not to cheat. Of course, if the gathered sample becomes large enough, the concern for representativeness is lessened somewhat.

Drawbacks of Assessing Actual Cheating Behavior.

Naturally, it would be highly desirable to accumulate research evidence in the cheating literature using true experimental designs and actual testing situations or situations in which actual class assignments are being completed. Although a number of experimental studies do appear in the literature (e.g., Tittle & Rowe, 1974; Vitro & Schoer, 1972), these studies are by far the exception rather than the rule. Further, even though an experimental design may be used, these studies often do not use actual testing situations or situations involving the completion of an actual class assignment (e.g., Houston, 1978; Houston & Ziff, 1976).

The lack of experimental studies in the cheating literature is no doubt due largely to the difficulty of detecting actual cheating behavior, especially with a "well-seasoned" cheater. If Moffatt's (1990) work is any indication, there are far too many methods of cheating, even in terms of exam taking alone, for a researcher to be certain that s/he had detected all or even most of the cheating. Moffatt discussed a number of cheating methods revealed by students in his study, some quite elaborate, such as hiring a professional student to take one's exams or breaking into a professor's office to steal and subsequently replace a copy of an exam. It stands to reason that the more experienced a cheater is, the more likely s/he is to remain undetected, particularly when the cheating scheme is fairly elaborate. In the same way that a cheater often remains undetected in the standard classroom situation, s/he is also likely to escape detection within an experimental situation. Therefore, just as the risk of underestimating the occurrence of cheating using self-report questionnaires, so too, it exists with the use of assessment of actual cheating behavior. In studies where actual testing situations or class assignments are examined, the degree of underestimation would appear to

be directly related to both the degree of sophistication of the cheater and the detection techniques of the proctor/professor.

In order to remedy this problem of detection of cheating in using actual observation of behavior, some researchers seek to control the cheating by using analogical tasks to assess cheating rather than actual examinations or class assignments. In studies where actual tests/class assignments are replaced with an experimental assessment task that is unrelated to the subject's grade, the degree of underestimation should relate to the external validity of the experimental task since subjects are not likely to be as personally invested in the experimental task as in their performance on an actual test/assignment that has implications for their grade.

Probabilistic Strategies in the Assessment of Cheating.

To some degree, the concerns regarding the inability to detect cheating in exam situations can be alleviated by the use of probabilistic detection methods. This class of methods to detect cheating functions by comparison of patterns of similar test responses between pairs of examinees. Within a pair of examinees, if there has been unauthorized sharing of test information (whether by one or both members of the pair), a (statistically) unusual degree of answer correspondence is expected. Establishment of an appropriate decision rule for making decisions about instances of suspected cheating is a crucial part of the process (Bellezza & Bellezza, 1995).

Originally, the number of errors in common between two examinees was assessed. When this number exceeded the maximum number expected by chance alone, the suspicion of cheating was raised (Dwyer & Hecht, 1996). More recent refinements, according to Dwyer and Hecht, allow comparisons to be made among all possible pairings of examinees for a given test, and allow the consideration of both the number of matching errors and the number of correct responses.

Dwyer and Hecht (1996) discuss the drawbacks to using probabilistic methods of detecting cheating. Among them they include the fact that even when both errors and correct responses between pairs of examinees demonstrate more than a chance degree of similarity, these similarities may be accounted for by factors other than cheating.

They propose alternate explanations such as error due to the fact that students may have studied together, that certain misconceptions may be widely prevalent within a given class based on the way the material was presented, or that the presence of certain distracters within the test itself that may be more likely to attract students. A second issue for concern with the use of probabilistic methods is the fact that even though certain patterns of similarity in student responding may be statistically rare even in the absence of cheating, these similarities are still possible. Thus, there is no guarantee that cheating has actually occurred.

A third area of concern pertains to the bias of probabilistic methods against cheaters who perform poorly on examinations (which can also be conceived of as a bias in favor of cheaters who are better students). Dwyer and Hecht state that this bias exists because in most cases, the users of such methods focus exclusively on the patterns of similarity among incorrect answers. They state that the tendency to largely ignore the correct responses is due to the fact that correct responses do not provide as much information about potential cheating as do incorrect responses. Correct answers can be due to either an examinee's knowledge of the material or to the copying of the correct answer from another student's paper. Students who do not copy large numbers of questions or who copy from a good student are more likely to escape detection using probabilistic strategies (Dwyer and Hecht, 1996).

Dwyer and Hecht (1994) recommend great caution in the use of probabilistic methods of detecting cheating. They do not advocate the exclusive reliance on these methods in taking disciplinary measures against suspected cheater. They are strong in their recommendation to

support evidence of cheating gained through probabilistic methods with additional evidence, particularly in light of the legal implications of falsely accusing students of academic misconduct.

In addition to the problems highlighted by Dwyer and Hecht (1996, 1994), an additional drawback for the present purposes is the limitation of probabilistic detection methods to an objective questioning format. Confining the conceptualization of cheating to a multiple choice or equivalent format would severely limit the applicability and scope of the present research, the goal of which is to formulate an integrative model of factors that can induce moral disengagement and subsequent cheating. Despite the need for more objective assessments of cheating in the literature, probabilistic methods of cheating detection were judged to be inappropriate in the current context.

Present Research: Selection of Self-Report Methodology.

Given the specified limitations of each form of assessment of cheating, it can be seen that each is less than ideal. In the final analysis, a decision was made to rely on self-reported cheating. This decision was made based upon the fact that the use of self-report measures is ubiquitous within the cheating literature. Use of this type of measure, despite the potential for underreporting of cheating, will provide a means of comparison that is consistent with previous work. Additionally, it must be kept in mind that each type of measure has its own flaws and its own potential for underestimating cheating.

Enker (1987) also makes a compelling case for electing a self-report measure of cheating rather than a behavioral one. She raises an ethical question in reference to behavioral measures of cheating, stating that the only way to use a behavioral measure of cheating would be to pretend that one is actually measuring something else. Since it would be detrimental to the methodological integrity of a study that investigated actual cheating with the

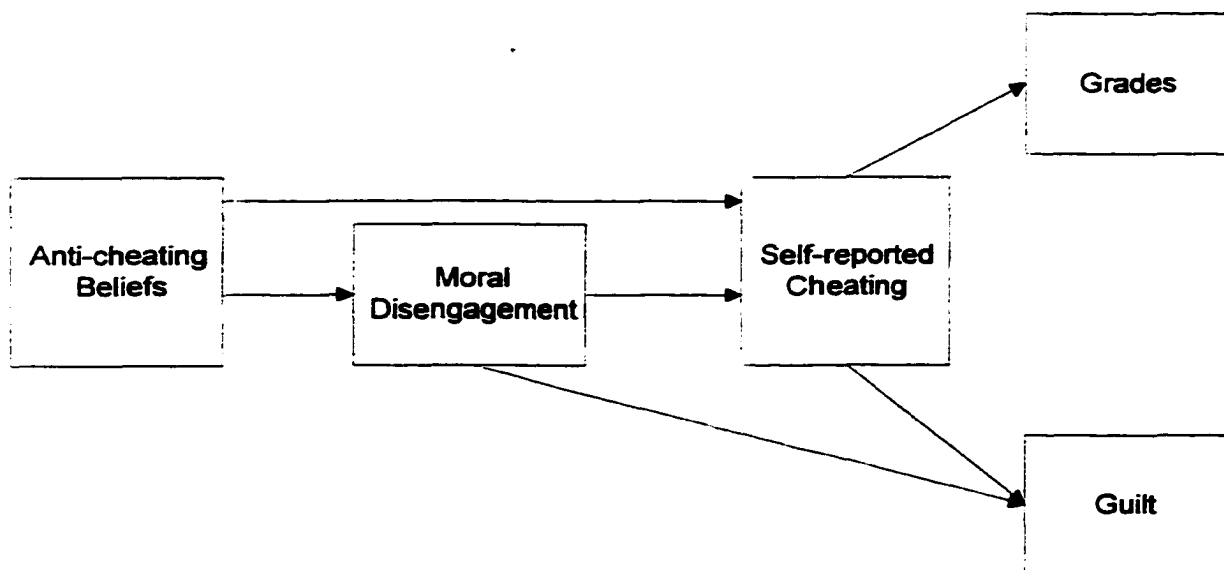
full knowledge of research subjects, such a measure of cheating would necessarily involve deceit. As Enker points out, it hardly seems ethical to measure cheating by engaging in an alternate form of “cheating”.

Proposed Path Model of Moral Disengagement and Student Cheating

The final section of Chapter II contains the proposed path model of moral disengagement and student cheating. The main model is presented in Figure 5 below.

As can be seen from Figure 5, the proposed model seeks to explicitly examine whether the relationship between Self-reported Cheating and Anti-cheating Beliefs is, indeed, mediated by Moral Disengagement. It also seeks to test whether there is a direct relationship between Anti-cheating Beliefs and Self-reported Cheating behavior. Further, it attempts to determine whether the use of Moral Disengagement strategies is associated with lower levels of Guilt.

Figure 5. Proposed Path Model of Moral Disengagement and Student Cheating



Finally, the model tests the relationship between Self-reported Cheating and Self-reported Academic Achievement.

Since the study of moral disengagement and student cheating is a new area in the psychological literature, the present research was designed to be mainly descriptive in nature. As such, a supplemental area of inquiry was included in an attempt to specify some of the background variables that may influence cheating beliefs and the tendency to morally disengage. Thus, in addition to the variables presented in Figure 5, eight supplementary variables were investigated in the present research. These eight variables were selected as potential contributors to cheating beliefs and moral disengagement, based upon a review of the literature. These background variables were examined as an extension of the main research model.

The eight “predictor” variables were broken into two categories: Individual Difference Variables (i.e., Religiosity, Self-Regulatory Efficacy to Resist Peer Temptation to Engage in Academic Cheating, Academic Self-efficacy, and Personal Achievement Goals) and Situational Variables (i.e., Parental Achievement Goals, Peers’ Cheating, Fear of Consequences [of cheating] and Exam Preparedness). The supplemental analyses of these background variables will be presented after the findings from the path analysis of the main research model.

Research Hypotheses Based Upon Proposed Path Model

The main research model generated the following hypotheses:

Hypothesis 1: Anti-cheating Beliefs (i.e., generalized beliefs that cheating is morally unacceptable) will show a negative relationship to Self-Reported Cheating; the relationship between generalized anti-cheating beliefs and cheating will be mediated by Moral Disengagement (i.e., cheating “beliefs-in-context,” as in a dual stage model).

It is expected that individuals who hold stronger anti-cheating beliefs would be less likely to morally disengage. They would be less likely than those holding weaker anti-cheating beliefs to accept excuses that minimize their responsibility for cheating or to accept excuses that reconstrue cheating as serving a moral purpose.

Hypothesis 2: Self-reported cheating will show a direct relationship to academic achievement.

Hypothesis 2 addresses the relationship of Self-reported Cheating and Academic Achievement. There is evidence of a negative relationship between grade point average and academic cheating (e.g., Bunn et al., 1992; Scheers & Dayton, 1987). Leming (1980), however, found that cheating is unrelated to academic achievement except under high risk conditions (i.e., under conditions where detection is likely). Under high risk conditions, high ability students are less likely to cheat, presumably because they have more to lose than low ability students if they are caught. The direction of a relationship between cheating and academic achievement has not been firmly established. Cheating should improve grades if it is done successfully, but low achieving students should be more likely to cheat. Thus, the relationship between cheating and academic achievement is expected to be related to whether grades have been assessed before or after the cheating.

Academic achievement is included in the present model to resolve a discrepancy between the findings in the literature of an inverse relationship between cheating and academic achievement and the findings from a pilot study in which academic achievement was positively associated with cheating. In this pilot study, admitting to more self-reported cheating predicted higher academic achievement (assessed as actual report card grades.)

Hypothesis 3: Moral Disengagement will be inversely related to Guilt.

According to Bandura (1990), Moral Disengagement functions by reducing guilt, thus paving the way for behavior that violates one's moral code.

Hypothesis 4: Self-reported Cheating will be negatively related to Guilt.

Since it is hypothesized that the tendency to morally disengage allows cheating to occur in the first place, it is expected that the levels of Guilt will be low in those who admit to higher levels of cheating. Moral disengagement allows one to escape self-censure for behavior that violates one's personal moral standards. Escape from self-censure is expected to manifest itself in low levels of guilt in those who admit to having cheated.

Chapter III

Method

Subjects

Two hundred two seventh and eighth grade parochial school students were given letters of consent to participate in this study. The final sample was composed of 175 seventh and eighth grade students (n=100 for seventh grade; n=75 for eighth grade). Seventy-eight males and 87 females participated in the study; 10 students did not indicate their sex. The mean age of these subjects was 13.5 years. The schools from which subjects were drawn are located in a middle class suburb of a large metropolitan area. The vast majority of students in the subject pool was Caucasian. No student was permitted to participate without informed personal and parental consent.

Procedures

A single questionnaire was administered to subjects in a group setting. The questionnaire was administered in students' regular classrooms. Teachers were not present during the administration, and students were assured of the anonymity of their responses. They were instructed not to put their names on the questionnaires. Students were also advised that they had the right to withdraw their consent to participate at any time, without penalty. Administration of the questionnaire was untimed, but all students completed the questionnaire within a regularly scheduled class period of approximately 45 minutes.

The experimental constructs were operationalized as indicated below. Appendix A contains the final version of the research questionnaire.

Variables in the Main Research Model

Anti-cheating Beliefs. In previous attempts to assess students' generalized anti-cheating beliefs, Pratt and McLaughlin (1989) assessed students' ethical beliefs with a series

of 5-point scales that ranged from "Very Unethical" to "Not at All Unethical." These ratings were made regarding a number of cheating-related behaviors (e.g., copying answers during an exam, obtaining an old test). Reliability information was not provided for these items. This type of measure was not suitable for the present research because it assesses specific cheating beliefs. In the present case, knowledge and endorsement of generalized anti-cheating principles was sought.

Aidala and Greenblat (1986) had students rate the degree to which various deviant behaviors were perceived as wrong. A scale ranging from "0" ("Not at all Wrong") to 10 ("Most wrong") was used. The evaluated behaviors, however, only included a single item pertaining to cheating (copying from another's paper in a school examination). This type of measure is also inadequate because it only considers a single type of cheating behavior.

Davis et al. (1992) also relied on a single item to assess anti-cheating beliefs: "Is it wrong to cheat?" Use of this type of item as the measure of anti-cheating beliefs is inadequate because there is likely to be very little variance in the obtained responses; it is expected that nearly 100% of all subjects would respond "yes." A better item would ask students to indicate the *degree* to which they perceive cheating to be wrong, as is done in the present research. Additionally, the present research contains a measure of whether students' cheating beliefs are universal or whether they are contextually flexible. The previous measures of cheating beliefs do not take context into account.

In the present research, Anti-cheating Beliefs were assessed via two questionnaire items. The first item (Appendix A, Section 1 – Question 12) assessed whether students believed that the moral appropriateness of cheating was contextually flexible. Students were required to indicate whether "Cheating on your school work is Never/Sometimes/Always wrong." The second item (Appendix A, Section 1 – Question 13) required students to indicate

how strongly they personally endorsed the immorality of cheating ("I believe that cheating is _____.") Response alternatives ranged from "Not immoral at all" to "Very immoral" on a 4-point scale. A composite measure, Anti-cheating Beliefs, was derived by summing the responses to these two items.

Moral Disengagement

Thirty-two items (Appendix A, Part IV – Questions 1-32), patterned after the work of Bandura (1996a), were designed to assess the tendency to use moral disengagement strategies in potential cheating situations. Four items were used to measure each of the eight different moral disengagement strategies: moral justification, euphemistic labeling, advantageous comparison, displacement of responsibility, diffusion of responsibility, distortion of consequences, dehumanization, and attribution of blame.

Each item paired one type of cheating behavior with one moral disengagement strategy. Students rated the degree to which they endorsed each moral disengagement strategy by using a five-point Likert-type scale, which ranged from "Strongly Agree" to "Strongly Disagree." A total moral disengagement score was computed by summing responses to the 32 Moral Disengagement items.

Self-reported Cheating. Subjects completed a set of 16 items (Appendix A, Part II, Questions 1-16) in which they were asked to rate the frequency with which they engaged in 16 different cheating behaviors. A composite measure of total Self-reported Cheating was derived by summing the responses for the 16 cheating items.

This type of measure of Self-Reported Cheating has a precedent in the literature. In the Greene and Saxe (1992) study, a set of 15 items was used to assess each of these two respective variables. Although there was significant overlap between the cheating behaviors used by Greene and Saxe and those used in the present research, certain behaviors were

modified in the present research because they were more applicable to a junior high population. Additionally, Greene and Saxe did not report reliability estimates for their Self-Reported and Peers' Cheating scales.

Academic Achievement. Academic achievement was operationalized in terms self-reported report card grades. It was assessed by an item that asked, "The grades I get in most classes are: (Appendix A, Part I – Question 6)". Students responded on a five-point scale, with a response range of "90% or Above" to "Below 60%."

Since the present research examines academic honesty, it was the author's original intent to assess actual grades in order to determine whether students who admitted to more cheating would also be likely to be dishonest in reporting their grades. However, it was not possible to obtain actual grades as a part of this study. All schools stated that they would decline participation if it was necessary to examine students' actual grades within the context of cheating. Thus, the schools that did agree to participate, did so under the condition that it would not be necessary to disclose student grades. It is common in cheating studies to use self-reported GPA as a measure of academic achievement (e.g., Scheers and Dayton, 1987; Bunn et al., 1992; Jendrek, 1992), probably for some of the same reasons that it had to be used in the present research.

Guilt

Guilt was measured by an item that asked students to state how strongly they agreed or disagreed with the item (Appendix A, Part I – Question 10), "If I cheated on a test, I would feel guilty." A 5-point scale was used in which possible responses ranged from "Strongly Agree" to "Strongly Disagree." In the literature, guilt is usually not formally considered in cheating research. Bandura (1996) is the one exception in the literature reviewed above; he measured guilt using a scale of Guilt and Restitution. This scale was designed to examine

students' degree of anticipated guilt, remorsefulness, and self-criticism for transgressive behavior, as well as their need to make restitution for transgressive behavior. Bandura reports an alpha reliability coefficient of .79 for this scale, and he states that factor analysis indicated that it is unifactorial. This scale contains 15 items that would have to be reconfigured in order to be specifically applicable to cheating. This scale also contains items pertaining to Restitution, which was not part of the proposed model. The decision was made to use a single item (as described above) to assess guilt in order to avoid having to add another 15 items to an already overly long questionnaire.

Supplemental Variables

In addition to the variables presented in the main research model in Figure 5, eight background variables were considered as part of supplemental analyses that attempted to determine some of the factors that may influence the strength of anti-cheating beliefs and the tendency to rely on moral disengagement strategies in potential cheating situations. Two types of background variables were included in the supplemental analyses: Individual Difference variables and Situational variables. A description of these variable is presented below.

Individual Difference Predictors of Moral Disengagement and Cheating Beliefs

The present research included four Individual Difference predictors of Moral Disengagement and Anti-cheating Beliefs. They were Religiosity, Self-Regulatory Efficacy to Resist Peer Temptation to Engage in Cheating (SRERC), Academic Self-efficacy, and Personal Achievement Goals. A discussion of each will follow.

Religiosity. In previous attempts to measure religiosity, Sierles et al. (1988) used the "self-reported extent of religious beliefs;" the exact operational definition of this variable was left unspecified. As stated above, Calabrese and Cochran (1990) assessed "irreligiousness" (i.e.,

the failure to attend church regularly or at least once a week). Although it is useful to behaviorally define this variable, it is not advisable to define a construct as the absence of a given quality.

Sutton and Huba (1995) include both a cognitive and a behavioral component in their operational definition of religiosity. The cognitive component was assessed by two questionnaire items relating to the extent that religion has played a major role in subjects' lives and subjects' perceptions that religion has played a part in their views concerning academic dishonesty. The behavioral component of religiosity was assessed in terms of an item that required students to indicate how frequently they attend church and a second item that asked students how often they participate in religious activities. The authors do not cite evidence of reliability for this measure of religiosity.

In the present research, it was originally planned that both a cognitive and behavioral component would be included in the Religiosity measure. The cognitive element (Appendix A, Section 1 – Question 4) was a five-point Likert-type item, "I am a religious person." Possible responses ranged from "Strongly Agree" to "Strongly Disagree." The behavioral element (Appendix A, Section 1 – Question 5) was a rating of the frequency of church attendance. Ratings were made on a five-point scale, with possible responses ranging from "Once or Twice a Year" to "Every Day" or "Do Not Go To Church."

The original intention was to create a composite Religiosity score by summing the responses for these two items. However, the reliability coefficient for the resulting scale was only .48, which indicates that these items do not share enough variance to justify their inclusion on the same scale. Since the present research is concerned with the prediction of behavior from *beliefs*, it was decided to retain only the cognitive (i.e., the religious "beliefs") component of the measure.

Self-Regulatory Efficacy to Resist Peer Temptation to Engage in Cheating (SRERC).

SRERC was measured with the question (Appendix A, Section 1 – Question 11), “If one of your peers (i.e., classmates or friends) were pressuring you to cheat on an exam or an assignment, how strongly would you rate your ability to resist that pressure to cheat?” Ratings of SRERC were made using a 5-point scale with response alternatives ranging from “Very strong (I am certain that I could resist the pressure)” to “Very weak (I am certain that I could NOT resist the pressure.)”

In the literature reviewed above, Bandura (1996b) is the only author to discuss self-regulatory efficacy to resist temptation. Self-regulatory efficacy to resist the temptation to engage in high-risk activities was operationalized by Bandura as the perception of one’s ability to refrain from alcohol/drug use, unprotected sexual activity, and transgressive behavior. This measure had to be refined to be applicable to the present research on cheating. Thus, in the present study, the variable became Self-regulatory Efficacy to Resist (peer temptation to engage in) Cheating. Bandura does not specify the precise method of measurement for this construct.

Academic Self-Efficacy. Academic Self-efficacy (Appendix A, Part VI – Questions 1-12) was operationalized in terms of students’ ratings of the degree of certainty they had that they would be able to attain each of 12 grading increments ranging from “A+” to “F” (e.g., “A+”, “A”, “A-”, “B+”, “B”, ... “F”). Twelve separate items that took the general form “I am [rating] that I will receive at **least** an overall average of [grade] on the next report card.” Certainty was measured by a 7-point scale that ranged from “Highly Certain” to “Highly Uncertain.” The ratings for each of these questions were collapsed into a single Academic Self-efficacy score. The assessment of Academic Self-Efficacy, was patterned after the work of Zimmerman and Bandura (1994).

Self-efficacy score was measured as the highest grade (of the 12 possible grade increments from "A+" through "F") for which a student gave a rating of a "3" or higher (i.e., "3," "2," or "1") on the 7-point scale. Ratings of "3" or higher correspond to "Certain," "Moderately Certain," and "Highly Certain," respectively, on the 7-point scale. Therefore, this measure of Academic Self-efficacy indicates the highest overall grade that students believe that they would be able to attain on the next report card, since all ratings *below* "3" on the 7-point scale indicate varying degrees of uncertainty regarding grades.

Personal Achievement Goals. Personal Achievement Goals (Appendix A, Part V – Questions 1-12[A]) was operationalized in terms of the ratings of satisfaction for each of 12 different grades. Students were required to rate on a 7-point Likert-type scale the degree of satisfaction/dissatisfaction they would experience with each listed grade increment from "A+" to "F" (e.g., "A+," "A-," "A-," "B+," "B", ... "F"). They were asked to make these ratings based on an item that stated, "How satisfied/dissatisfied would YOU be with each of the following grades?" The 7-point scale used response options that ranged from "Very Dissatisfied" to "Very Satisfied." The assessment of Personal Achievement goals, was modeled after the work of Zimmerman and Bandura (1994).

The ratings from these 12 questions were collapsed into a single measure of Personal Achievement Goals. Personal Achievement Goals was operationalized as the lowest grade ("A+" through "F") at which students gave a rating of "5" or higher (i.e., "5," "6," or "7"). This measure of Personal Achievement Goals indicates the lowest grade with which a student would be at least minimally satisfied, because ratings *below* "5" indicate either neutrality (i.e., neither satisfaction nor dissatisfaction) or dissatisfaction with a given grade.

Situational Predictors of Moral Disengagement and Cheating Beliefs

The present research included four Situational predictors of Moral Disengagement and Anti-cheating Beliefs. They were Parental Achievement Goals, Peers' Cheating, Consequences of Cheating and Exam Preparedness. A discussion of each will follow.

Parental Achievement Goals. The assessment of perceived Parental Achievement Goals was accomplished in exactly the same way as was the assessment of personal achievement goals, except in the case of Parental Achievement Goals, students were required to rate the degree of satisfaction/dissatisfaction they believed their parents would experience if the student were to receive each of the same 12 grade increments. The ratings were made based upon an item that stated, "How satisfied/dissatisfied would **YOUR PARENTS** be if you received each of the following grades?" The items assessing Parental Achievement Goals were based on the work of Zimmerman and Bandura (1994).

The ratings from these 12 questions were collapsed into a single measure of Parental Achievement Goals. Parental Achievement Goals was operationalized as the lowest grade ("A+" through "F") at which students gave a rating of "5" or higher (i.e., "5," "6," or "7"). This measure of Parental Achievement Goals indicates the lowest grade with which a student believes that his/her *parent(s)* would be at least minimally satisfied, because ratings *below* "5" indicate either neutrality (i.e., neither satisfaction nor dissatisfaction) or dissatisfaction with a given grade.

Peers' Cheating. The measure of Peers' Cheating (Appendix A, Part III, Questions 1-16) required students to rate the frequency with which they believed that students in their class engaged in each of 16 different cheating behaviors. The cheating behaviors that were assessed for the Peers' Cheating scales were the same ones used for the Self-reported

Cheating scale. A composite Peers' Cheating score was derived by summing the responses to the 16 Peers' Cheating items.

Although there was no specific precedent for measuring Peers' Cheating in the literature, there was a precedent for assessing one's own cheating behavior. The Peers' Cheating scale was formulated based upon the other self-reported cheating scales in the literature (see above.)

Consequences of Cheating. Davis et al. (1992) assessed both the consequences of cheating and students' expectations of being caught in an act of cheating. Their survey included an item that asked, "What should be done if someone is caught cheating?" This measure of does not really address the issue of what the consequences students would actually expect for him/herself in a potential cheating situation. What "should" be done to cheaters may not have any relationship to what cheaters actually anticipate being done to them. Since the proposed model attempts to assess cheaters' motivations for deciding to cheat or not cheat, this type of measure was not used.

Davis et al. used two additional questions to determine students' perceptions of cheating based upon the likelihood of being caught (i.e., "Should students go ahead and cheat if they know they can get away with it?" and "Should students try to cheat even when they know that their chances of getting away with it are slim?") Again, these questions are phrased in the abstract and do not assess students' perceptions of the likelihood that they themselves will be caught/punished.

Genereux and McLeod (1995) measured fear of punishment (if caught cheating) with a single item in which students were asked to rate on a 7-point scale how much the punishment for cheating would influence their decision to cheat on an exam (i.e., if the punishment were a warning versus expulsion from college). This measure still does not address the

consequences that students perceive for themselves in actual cheating situations. There is no guarantee that students perceive that they will be punished at all if they are caught cheating.

In the present research, **Consequences of Cheating** was operationalized in terms of fear of punishment. It was assessed with an item (Appendix A, Part I – Question 9) that inquired, “If you were caught cheating on a test, your punishment would probably be:.” A 5-point scale of response alternatives ranged from “Extremely Severe” to “Very Mild.” For the purposes of the present research, this type of item is more useful because it inquires directly of respondents what they perceive the consequences to be for them specifically.

Exam Preparedness. Exam Preparedness for examinations was assessed by the item (Appendix A, Part I – Question 7), “When I study for an exam, I usually feel that the amount of time I have spent studying is:.” A 5-point Likert-type scale was used in which students rated their typical preparation from “Much more than is necessary” to “Much less than is necessary.”

It is difficult to find a precedent in the literature for a measure of exam preparedness because it usually shows up in surveys as a student-generated reason for cheating behavior. In this case, it is not formally controlled or measured by the researcher. In the present model, the measure of Exam Preparedness that was used formally considers the degree to which a student’s typical level of preparation may influence his/her decision to cheat.

Chapter IV

Results

Preliminary Issues

A number of preliminary issues will be addressed prior to the presentation of the results from the path analysis. First, relevant findings from a prior pilot study will be discussed. This discussion will be followed by some general simple statistics for the present research sample. Finally, the analyses for the main and supplemental models will be presented.

Factor Structure of Scales. Pilot testing of the research scales determined that the Self-reported Cheating, Peers' Cheating, and the Moral Disengagement scales are unifactorial. It was important to examine the factor structure of the cheating scales in light of the findings which distinguished between active and passive cheating and between test-related cheating and plagiarism-like behaviors (e.g., Graham et al., 1994). The factor

Table 3: Reliability Coefficients for Research Scales

| Scale | Reliability Coefficient |
|--|--------------------------------|
| Moral Disengagement | .94 |
| Peers' Cheating | .91 |
| Personal Academic Achievement Goals | .87 |
| Self-reported Cheating | .86 |
| Academic Self-efficacy | .85 |
| Parental Academic Achievement Goals | .83 |
| Anti-cheating Beliefs | .73 |

structure of the Moral Disengagement scale was examined to find support for Bandura's (1996b) conclusion that Moral Disengagement had a single factor structure. This scale, while patterned after the Bandura scale, was adapted to cheating behaviors, so it was necessary to determine an appropriate factor structure.

Scale Reliabilities. Table 3 contains the reliability coefficients (i.e., Cronbach alpha) for the various scales used in present research. They are presented in descending order of

Table 4: Means and Standard Deviations (N=175)

| VARIABLE | <i>M</i> | <i>SD</i> | <i>Min.</i> | <i>Max.</i> | <i>Meaning of High End of Scale</i> |
|-------------------------------|-----------------|------------------|--------------------|--------------------|--|
| Cheating Beliefs | 6.16 | 1.05 | 2 | 7 | Stronger anti-cheating beliefs |
| Religiosity | 4.22 | 0.79 | 1 | 5 | More religious |
| SRERC | 1.85 | 0.94 | 1 | 5 | Lower self-effic. to resist cheating |
| Self-reported Cheating | 67.14 | 8.58 | 37 | 80 | Less self-reported cheating |
| Peers' Cheating | 49.41 | 12.92 | 19 | 80 | Perceive less cheating in peers |
| Cheating Conseq. | 2.32 | 0.93 | 1 | 5 | Milder punishment for cheating |
| Acad. Self-efficacy | 10.79 | 1.94 | 3 | 12 | Higher academic self-efficacy |
| Personal Ach. Goals | 7.44 | 2.01 | 1 | 11 | Higher achievement goals for self |
| Parental Ach. Goals | 7.40 | 1.77 | 1 | 12 | Higher parental ach. goals |
| Acad. Achievement | 1.50 | 0.63 | 1 | 3 | Lower self-rep. report card grades |
| Exam Preparedness | 3.06 | 0.92 | 1 | 5 | Feel less prepared for exams |
| Moral Disengagement | 115.7 | 22.36 | 44 | 160 | More morally engaged |
| Guilt | 1.88 | 1.11 | 1 | 5 | Less guilt after cheating |

reliability coefficient. All scales had fairly good reliability coefficients, with the exception of Anti-cheating Beliefs. The reliability coefficient for this scale (.73) was slightly lower than desired.

Simple Statistics

Table 4 indicates the means and standard deviations for all constructs that were included in the present research. It contains the minimum and maximum reported values for each variable, as well as the significance of a high rating on each respective scale (i.e., the meaning of the high end of the scale).

Profile of an "Average" Student

Inspection of Table 4 makes it possible to create a broad profile of an "average" student with regard to academic dishonesty. Such a profile is not expected to fit any one specific student, but rather, it is designed to provide a very general picture of this group of students as a whole. The supplemental variables are included in order to provide a more complete profile.

It can be seen from Table 4 that the students in the sample tended to have a very strong beliefs that cheating is wrong. The mean was 6.16 out of a possible maximum score of 7. Also, the standard deviation is fairly low, so that most students had anti-cheating beliefs similar to the mean. These students also tended to be fairly religious. The mean Religiosity score was 4.22 out of a possible 5. Again, the standard deviation (.79) indicates that most students fell somewhere fairly close to the mean.

Students as a whole felt that they would be able to resist peer pressure to cheat on an examination. The mean Self-regulatory Efficacy to Resist Cheating (SRERC) score was 1.85 on a 5-point scale, where 1 was "Very Certain." This mean indicates that students as a whole rated their ability to resist peer pressure to cheat somewhere between "Very Strong" and "Fairly Strong." Examination of the standard deviation for SRERC also supports the idea that,

as a group, the students in the sample did not perceive themselves as deficient in the ability to resist peers' encouragements of academic dishonesty.

Students believed that they cheat significantly less than their peers ($t=20.85$, $p<0.0001$). The mean for Self-reported Cheating was 67.14, and the mean for (Perceived) Peer Cheating was 49.41. Higher scores on these two scales indicate less cheating. It should be noted that the range of scores for the Self-reported Cheating scale was between 37 and 80, but the range of scores for the Peers' Cheating scale was between 19 and 80. There was less variability in students' assessments of their own cheating than in their assessments of their peers' cheating, which is reflected in the standard deviations for these two scales.

Students didn't show strong beliefs about the consequences of cheating. The mean for the cheating consequences scales was 2.32 out of a maximum possible score of 5. The standard deviation was also small. As a general group tendency, students seem to believe that the consequences of cheating are neither very severe nor very mild.

These students also had fairly high academic self-efficacy. They tended to believe that they were capable of attaining an overall grade of somewhere between an "A-" and an "A" on the next report card. The very worst rating for Academic Self-efficacy was a "3," which would indicate that even the student with the lowest self-efficacy rating believed that s/he would receive at least a "D+" on the next report card. No student thought that s/he would fail on the next report card.

Students' personal academic achievement goals were highly similar to those they perceived their parents to hold for them. The mean Personal Academic Achievement Goal was 7.44 and the mean Parental Academic Achievement Goal was 7.40. There was somewhat more variability in the Personal Academic Achievement Goal than in the Parental Academic Achievement Goals; their standard deviations were 2.01 and 1.77 respectively.

These findings show that the minimum grade with which students felt that both they and their parents would be at least "A Little Satisfied" was somewhere between a "C" and a "C+." Thus, students believe, as a whole, that it is acceptable to be academically "average," and that their parents would not be dissatisfied if they performed academically in at least the "average" (i.e., "C") range.

The sample reported that their grades were usually in the range between "80-89%" and "90% or above." Thus, it might be said that the group as a whole reported grades that were in or around the "B" range. The range for Self-reported Academic Achievement was from "1" to "3," which indicates that no student reported grades that were "usually" below 70%. Since the participating schools were parochial schools, the academic standard for passing is 70%, rather than the 65% that is common in many public school systems. It is entirely reasonable that students would report that they usually receive grades of 70% or better because the possibility of academic dismissal exists if they do not meet this standard.

This sample of students felt that they usually spend "Exactly the amount [of time] that is necessary" when they study for an exam. The mean Exam Preparedness score was 3.06 out of a possible 5.

These students showed a fairly high degree of moral engagement. The mean Moral Disengagement score was 115.7. The highest possible score was 160 (which would be assigned to the student who strongly disagrees with all 32 cheating rationalizations presented in the scale), and the lowest possible score was 32 (which would be assigned to the student who strongly endorses each of the 32 cheating exonerations). There were scores of 160 (i.e., students who were very low on moral disengagement, and thus, very highly engaged) but there were no scores that came close to 32. The lowest reported Moral Disengagement score was 44. Therefore, no student Strongly Agreed with all of the cheating exonerations.

Finally, students reported that they would feel a fair degree of guilt if they cheated on an exam. The mean Guilt rating was 1.88 out of a possible 5. This mean indicates that, as a whole, students would feel somewhere between moderate and strong guilt if they were to cheat. It is important to notice that there were, however, some students who reported that they would not really feel guilty if they cheated (i.e., ratings of "5.")

Summary of Preliminary Issues

The preceding section contained a discussion of the adequacy of the present research scales (e.g., factor structure of scales, reliabilities). It also contained a general profile of an "average" student based on the means and standard deviations for each of the research scales. It can be seen from these discussions that there is evidence to suggest that the research scales were adequate for their intended use. Further, the student profile highlights the fact that students in the research sample actually did vary on each of the research scales. The issue of variability is very fundamental to model construction, as there is little point to modeling when all members of a sample/population behave uniformly. With these issues addressed, the results for the path analysis of the main model will be presented in the following section.

Path Analysis

Path analysis was used to determine the nature of the relationships among the variables in the proposed research model (Figure 5). The correlation matrix in Table 5 was used to perform the analysis. Analysis of this model yielded a nonsignificant chi square statistic [$\chi^2(4) = 9.43, p = 0.051$], which is desirable for a model that is well fit to the data. The ratio of the chi square statistic to degrees of freedom was 2.36, which is within Kline's (1998) guideline of ≤ 2.5 for smaller samples. Additionally, the Bentler-Bonett

Table 5: Correlation Matrix

| | Self-reported Grades | Guilt | Self-reported Cheating | Moral Disengagement | Cheating Beliefs |
|------------------------|----------------------|-------------|------------------------|---------------------|------------------|
| Self-reported Grades | 1.00 | | | | |
| Guilt | .06 | 1.00 | | | |
| Self-reported Cheating | -.14 | -.50 | 1.00 | | |
| Moral Disengagement | <u>-.16</u> | -.55 | .69 | 1.00 | |
| Cheating Beliefs | <u>-.17</u> | -.39 | .48 | .51 | 1.00 |

Note: $p < .05$ = underlined; $p < .001$ = **bold**.

NFI was .96 and the Bentler CFI was .98, which is within the suggested range of .90 or higher (Kline, 1998). The RMSEA was .05, which is within the .10 or lower range that Kline recommends. All residual covariances were very small.

Figure 6 shows the path coefficients for the main research model. All paths in the model were significant, with the exception of the path between Self-reported Cheating and Self-reported Grades. Table 6 shows that only one of the four main research hypotheses was rejected.

Figure 6 should be interpreted as follows, given the data coding scheme that was used (See Table 4, p. 94). A strong belief that cheating is wrong is predictive of a tendency to remain morally engaged. (Similarly, weak beliefs that cheating is wrong are associated with a tendency to morally disengage.) Students with a high score on the Moral Disengagement scale also tended to have a high score on the Self-reported Cheating scale. This relationship suggests that students who remain morally engaged are less likely to admit to cheating, and those who tended to report the use of moral disengagement strategies also tended to report

Figure 6: Path Coefficients for the Main Research Model

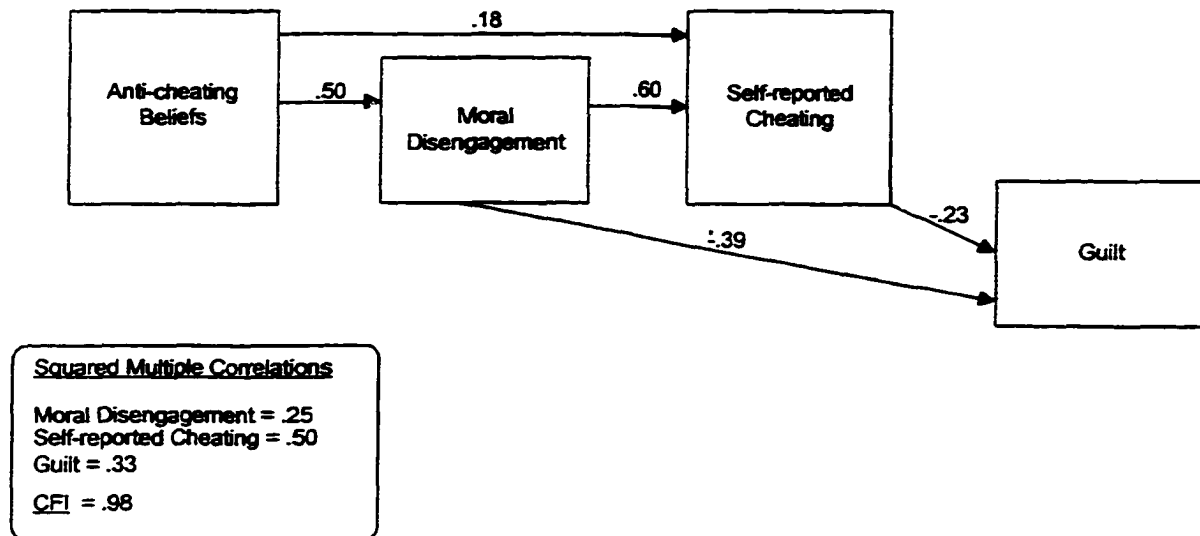


Table 6: Summary of Research Hypotheses

| Hypothesis | Hypothesized Relationship | Supported by Path Analysis? |
|--------------|--|-----------------------------|
| Hypothesis 1 | Stronger anti-cheating beliefs assoc. with less Self-reported Cheating (Indirect relationship, mediated by Moral Disengagement) | YES |
| Hypothesis 2 | Greater levels of Self-reported Cheating associated with Higher Self-reported Grades | NO |
| Hypothesis 3 | Greater levels of Moral Disengagement associated with lower levels of Guilt | YES |
| Hypothesis 4 | Greater Self-reported Cheating associated with lower levels of Guilt | YES |

engaging in higher levels of cheating. Additionally, students who strongly believe that cheating is wrong (high score on Cheating wrong item) are less likely to cheat (high score on Self-reported Cheating scale).

Higher levels of self-reported cheating (low score on Self-reported Cheating scale) were associated with less guilt (high score on Guilt item). Students who tended to morally disengage (low scores on the Moral Disengagement scale) also tended to report that they would experience less guilt (high score on the Guilt item). Students suspend their moral standards, which allows them to cheat as well as feel less guilty about cheating.

Finally, it was found that higher levels of self-reported cheating (low score on Self-reported Cheating scale) were not predictive of lower levels of academic achievement (high score on Self-reported Grades item). Thus, Hypothesis 2 was not supported.

Supplementary Analyses

The results of the path analysis testing the main research model represent an important first step in building a model of moral disengagement and student cheating. They provide preliminary evidence that the missing link between moral beliefs and moral behavior may be found in Moral Disengagement. However, the model would be even more useful if it could specify some of the factors that influence cheating beliefs and the tendency to morally disengage. As such, various supplementary analyses were conducted in an attempt to specify these factors, and ultimately, to integrate these factors with the moral disengagement model that was supported by the above path analysis.

Predictors of Cheating Beliefs and Moral Disengagement

Since the present area of research is very new and not well documented in the literature, the first attempt to determine potential predictors of Cheating Beliefs and Moral

Disengagement was made through two separate regression analyses. These analyses were done subsequent to the path analysis of the main research model.

In these analyses, the eight supplementary variables discussed above were entered as independent variables, and Anti-cheating Beliefs and Moral Disengagement, respectively, were the dependent variables. It will be recalled that these eight potential predictors of cheating beliefs and moral disengagement were divided into two categories: Individual Difference Variables (i.e., Religiosity, Self-Regulatory Efficacy to Resist Peer Temptation to Engage in Academic Cheating, Academic Self-efficacy, and Personal Achievement Goals) and Situational Variables (i.e., Parental Achievement Goals, Peers' Cheating, Fear of Consequences and Exam Preparedness).

Table 7: Summary of Regression Analyses

| <i>Predictor Name</i> | <i>Significant Predictor of ANTI-CHEATING BELIEFS?</i> | <i>Significant Predictor of MORAL DISENGAGEMENT?</i> |
|----------------------------|--|--|
| Religiosity | ✓ | ✓ |
| SRERC | ✓ | ✓ |
| Academic Self-efficacy | | ✓ |
| Personal Achievement Goals | ✓ | |
| Parental Achievement Goals | | |
| Peers' Cheating | ✓ | ✓ |
| Cheating Consequences | ✓ | ✓ |
| Exam Preparedness | | ✓ |

Regression analysis, rather than path analysis, was used for this preliminary exploration of the relationship of these eight background variables to cheating beliefs and moral disengagement. This decision was made because it was too early in the model building process to form meaningful predictions of the paths that might result among these predictors and those in the main model.

Table 7 provides a summary of the findings from the regression analyses. The significant predictors of each dependent variable are indicated by check marks.

It was found as a result of these regression analyses that, in descending order, the best predictors of Anti-cheating Beliefs were: Self-efficacy to Resist Peer Temptation to Engage in Academic Cheating (SRERC), Peers' Cheating, Cheating Consequences, Personal Achievement Goals, and Religiosity. Similarly (also in descending order), the best predictors of Moral Disengagement were: SRERC, Peers' Cheating, Cheating Consequences, Religiosity, Exam Preparedness, and Academic Self-efficacy. These findings point to a conclusion that both situational (e.g., Cheating Consequences, Exam Preparedness) and individual difference variables (e.g., SRERC) may play a role in cheating beliefs and moral disengagement, as they do in student cheating.

Expanding the model

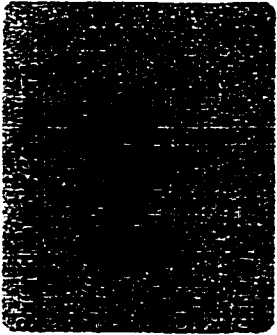
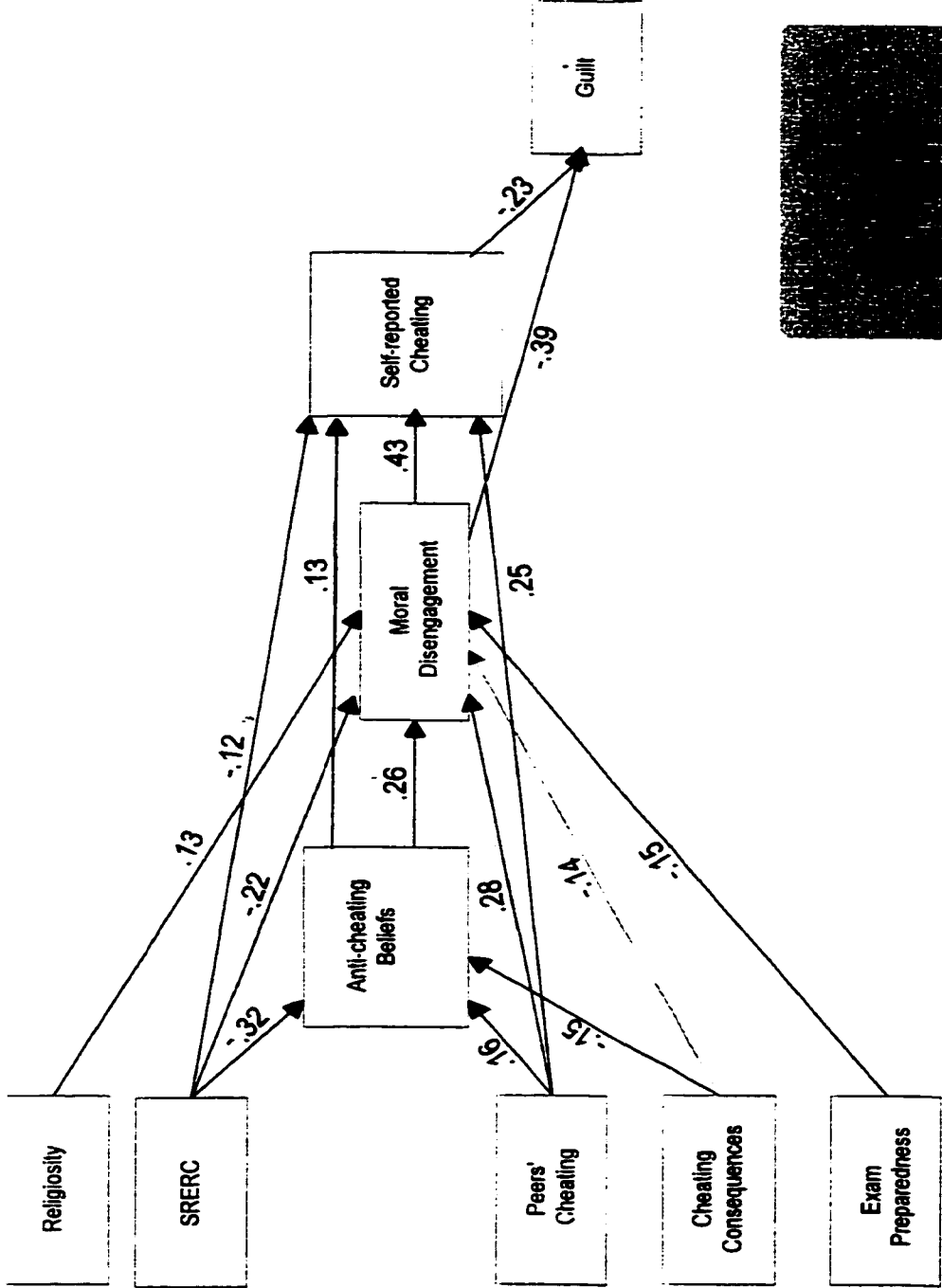
As stated above, the goal of the supplementary regression analyses was to provide evidence that some or all of the eight background variables were significant predictors of Anti-cheating Beliefs and Moral Disengagement. These supplementary regression analyses provided direction for expanding the original research model to include the significant predictors of Anti-cheating Beliefs and Moral Disengagement. A systematic attempt was made to add each of the significant variables from the regression analyses to the main research model (Figure 6), so that new paths were added only if they increased the predicted variance.

Table 8: Correlation Matrix for the Expanded Model

| | Self-rep. Grades | Exam Prep. | Guilt | SRERC | Self-Rep. Cheating | Peers' Cheating | Moral Diseng. | Relig. | Cheat. Conseq. | Cheat Beliefs | Pers. Acad. Goals | Acad. Self-efficacy |
|-----------------------------|------------------|-------------|-------------|-------------|--------------------|-----------------|---------------|-------------|----------------|---------------|-------------------|---------------------|
| Self-reported Grades | 1.00 | | | | | | | | | | | |
| Exam Preparedness | <i>.17</i> | 1.00 | | | | | | | | | | |
| Guilt | <i>.06</i> | <i>.19</i> | 1.00 | | | | | | | | | |
| SRERC | <i>.20</i> | <i>.28</i> | <i>.35</i> | 1.00 | | | | | | | | |
| Self-reported Cheating | <i>-.14</i> | <i>-.28</i> | <i>-.50</i> | <i>-.44</i> | 1.00 | | | | | | | |
| Peers' Cheating | <i>-.08</i> | <i>-.17</i> | <i>-.30</i> | <i>-.18</i> | <i>.52</i> | 1.00 | | | | | | |
| Moral Disengagement | <i>-.16</i> | <i>-.36</i> | <i>-.55</i> | <i>-.48</i> | <i>.69</i> | <i>.46</i> | 1.00 | | | | | |
| Religiosity | <i>-.20</i> | <i>-.25</i> | <i>-.32</i> | <i>-.21</i> | <i>.22</i> | <i>.05</i> | <i>.29</i> | 1.00 | | | | |
| Cheat Consequences | <i>.00</i> | <i>.21</i> | <i>.39</i> | <i>.25</i> | <i>-.37</i> | <i>-.29</i> | <i>-.39</i> | <i>-.10</i> | 1.00 | | | |
| Cheating Beliefs | <i>-.17</i> | <i>-.16</i> | <i>-.39</i> | <i>-.41</i> | <i>.48</i> | <i>.27</i> | <i>.51</i> | <i>.19</i> | <i>-.29</i> | 1.00 | | |
| Personal Acad. Goals | <i>-.62</i> | <i>-.15</i> | <i>-.04</i> | <i>-.08</i> | <i>.06</i> | <i>.04</i> | <i>.11</i> | <i>.22</i> | <i>.09</i> | <i>.12</i> | 1.00 | |
| Academic Self-efficacy | <i>-.45</i> | <i>-.38</i> | <i>-.17</i> | <i>-.29</i> | <i>.18</i> | <i>.11</i> | <i>.30</i> | <i>.19</i> | <i>-.04</i> | <i>.13</i> | <i>.36</i> | 1.00 |

Note: *p* < .05 = underlined; *p* < .01 = *italics*; *p* < .001 = **bold**.

Figure 7: The Expanded Model



The model that was best fit to the data is presented in Figure 7. The correlation matrix in Table 8 was used to perform the analysis. Analysis of this model yielded a nonsignificant chi square statistic [$\chi^2 (17) = 32.32, p = .014$], which is desirable for a model that is adequately fit to the data. The ratio of the chi square to degrees of freedom was 1.90, which is within Kline's (1998) guideline of ≤ 2.5 for smaller samples. Additionally, the Bentler-Bonett NFI was .93 and the Bentler CFI was .97, which both exceed the suggested range of .90 or higher (Kline, 1998). The RMSEA was .07, which is within the .10 or lower range that Kline recommends. The residual covariances were all below .20. Based on these criteria, the expanded model was not rejected.

Examination of the significant paths in Figure 7 suggests the main research model is supported when the predictor variables are added. As in the original model, strong Anti-cheating Beliefs were associated with the tendency to remain morally engaged (See Table 4, p.94). The tendency to remain morally engaged was associated with lower levels of Self-reported cheating. A direct link between Anti-cheating Beliefs and Self-reported Cheating was also found. Stronger beliefs that cheating is wrong were associated with lower levels of Self-reported Cheating. Lower levels of Moral Disengagement and Self-reported Cheating were associated with Higher levels of Guilt.

Figure 7 also suggests that among the background variables tested as part of the expanded model, SRERC and Peers' Cheating were the strongest. SRERC showed path coefficients of -.32, -.22, and .12 for Cheating Beliefs, Moral Disengagement, and Self-reported Cheating, respectively. Thus, students who report low self-efficacy to resist cheating have weaker beliefs that cheating is wrong, are less likely to remain morally engaged in potential cheating situations, and are more likely to engage in cheating. Peers' Cheating was also a predictor of Anti-cheating Beliefs, Moral Disengagement, and Self-reported Cheating,

with path coefficients of .16, .28, and .25, respectively. These findings suggest that students who report a greater ability to resist peer temptation to cheat may have stronger beliefs that cheating is wrong and may be more likely to remain morally engaged. Students who perceive their classmates to engage in greater amounts of cheating have weaker beliefs that cheating is wrong, are likely to remain morally engaged, and report having engaged in more cheating themselves.

Figure 7 indicates that students who believe that there will be only minor consequences for cheating had weak beliefs that cheating is wrong and were more likely to morally disengage in potential cheating situations. Students who were more religious and who generally felt less prepared for exams were also more likely to morally disengage.

Gender Issues

Although it was not the main focus of the present research, the role of gender in a moral disengagement model of student cheating was examined as part of a second set of post hoc analyses. For these analyses, a series of t-tests was done to examine whether the scores of male and female students were reliably different on any of the research scales.

These analyses showed that males and females did not differ significantly on the Moral Disengagement, Self-reported Cheating, Peers' Cheating, Self-reported Grades, Cheating Consequences, Guilt, Personal Achievement Goals, Academic Self-efficacy, Religiosity, and Exam Preparedness scales. However, the t-test ($t=-2.00$, $p=.047$) for the SRERC scale revealed that males perceive themselves to be significantly better at resisting peer pressure to cheat. Males were significantly more likely than females to perceive that their parents held high academic achievement goals for them ($t=2.30$, $p=0.02$). Finally, males held significantly stronger anti-cheating beliefs than females ($t=3.12$, $p<.002$). These gender-related findings should be further addressed in future research.

Chapter V

Discussion

Main Model

The present research is unique in the literature for three reasons. First, it sought to examine the relationship between cheating beliefs and (self-reported) cheating behavior and to account for the often-reported discrepancy between the two. Second, it sought to expand the research on moral disengagement to the area of academic dishonesty. Specifically, an attempt was made to provide evidence of the contextual nature of moral decision making. Finally, the present research attempted to specify some of the precursors of cheating beliefs and moral disengagement; it sought to enumerate some of the factors that might influence the belief that cheating is wrong and the tendency to set aside moral standards that prohibit cheating.

The main research model produced a number of meaningful findings for the cheating literature. Among these was the finding that strong anti-cheating beliefs may increase the likelihood that students will remain morally engaged. The tendency to remain morally engaged was associated with a lower incidence of cheating. Students who morally disengaged were less likely to report guilt associated with cheating, which supports the work of Bandura (1990). Students who reported frequent cheating were less likely to experience guilt as a result of their cheating (i.e., because they have morally disengaged). Naturally, all of these findings must be replicated in future research.

The fact that the majority of the original research model was supported by the data is highly significant because it provides preliminary evidence that Moral Disengagement plays a role in students' decision to cheat. It also provides evidence that Moral Disengagement may

serve as a bridge between cheating beliefs and cheating behavior. The present research suggests that when moral beliefs do not mirror behavior, moral disengagement, rather than "moral schizophrenia," may be at work.

The one path in the original model that was not supported was the one between Self-reported Cheating and Self-reported Grades. Thus, the hypothesis stating that greater levels of Self-reported Cheating would be associated with higher Self-reported Grades was rejected. Further research is needed to clarify the relationship between cheating and grades. It is not entirely surprising that the path between these two variables failed to reach significance, given the low correlation between cheating and grades (-.14) and the inconsistent findings in the literature. For example, Bunn et al. (1992) found an inverse relationship between academic cheating and grade point average, but Leming (1980) found cheating to be unrelated to academic ability in general, except under high risk conditions, when high ability students were less likely to cheat than low ability students.

Within the larger context of a Social Cognitive model of cheating, it is predicted that the anticipated reward of high grades would potentially influence students to cheat. Yet, such a relationship did not manifest itself in the present research. The use of self-report measures for both personal cheating and grades may have influenced the findings pertaining the relationship between cheating and grades. If actual grades were used in actual cheating situations, the findings may have been different. However, the use of self-report measures was necessary in the present research, for the reasons described above.

Regression Analyses

The regression analyses are also important in the process of building a Social Cognitive model of moral disengagement and student cheating. They provide evidence that both cheating beliefs and moral disengagement are influenced by situational (e.g., Exam

Preparedness, Cheating Consequences) and individual difference (e.g., Religiosity, Academic Self-efficacy) variables. It is important to note that the notion of "contextual" (i.e., situational) variables can itself incorporate intra-individual factors, as well as those factors that are more traditionally viewed as "situational." Individual difference variables are able to be subsumed under the category of "contextual" because the individual, and where s/he falls on the continuum of various individual difference variables, must always operate *within* a context. Thus, the point at which an individual lies on the continuum for a given individual difference variable (e.g., high on Religiosity, low on Personal Achievement Goals) becomes just one more facet of the total context within which all behavior occurs and within which all moral decisions are made. Therefore, if the findings regarding the individual difference variables are considered as contextual factors, it can be said there was fairly strong evidence that both Moral Disengagement and Cheating Beliefs are contextually influenced.

Examination of the specific findings from the regression analyses provides further insight into the contextual nature of student cheating. It is important to note that for both Cheating Beliefs and Moral Disengagement, the same three variables were the best predictors (in descending order): Self-regulatory Efficacy to Resist Peer Temptation to Engage in Academic Cheating, Peers' Cheating, and Cheating Consequences. Thus, perceptions that one is able to resist peers' encouragements to cheat and the perceptions that other students cheat less frequently was associated with stronger beliefs that cheating is unacceptable and the belief that situational exonerations for cheating are also unacceptable. Also, the expectation of serious consequences for cheating was associated with stronger beliefs that cheating is unacceptable, regardless of the situational encouragements to do so. When these three variables (SRERC, Peers' Cheating, and Cheating Consequences) are considered together, it becomes clear that the classroom context is highly influential in students' decisions

to cheat. Their decision to cheat is mediated by their personal beliefs about cheating and the degree to which they tend to accept moral exonerations for cheating.

Religiosity was also a significant predictor of both Cheating Beliefs and Moral Disengagement. It is not surprising that Religiosity was a significant predictor of Anti-cheating Beliefs. Beliefs that cheating is wrong would seem to be a variation of the belief that "Thou shalt not steal." The general principle would appear to be to refrain from taking anything that is not one's own. It is consistent, then, that those who are more religious would be more likely to have strong beliefs that prohibit cheating. By extension, it follows that those who are more religious should be less likely to suspend their beliefs that cheating is not acceptable.

Academic self-efficacy and Exam Preparedness were significant predictors of Moral Disengagement but not of Cheating Beliefs. Therefore, students who believed that they were capable of receiving higher grades on their next report card and who felt that they were usually very prepared for classroom examinations were less likely to morally disengage. However, knowledge of a student's level of academic self-efficacy and degree of exam preparedness did not reliably relate to a student's beliefs about cheating.

Similarly, Personal Achievement Goals was a significant predictor of Cheating Beliefs but not of Moral Disengagement. Students who had higher Personal Achievement Goals were more likely to have strong beliefs that cheating is wrong. However, having high grade expectations for oneself did not reliably predict the degree to which students accept moral exonerations in potential cheating situations. It might be expected that students who hold high achievement standards for themselves would be the most likely to suspend their anti-cheating standards because cheating may be viewed as necessary to avoid the self-censure that might accompany poor grades. The data did not support this view. Instead, the finding that high Personal Achievement Goals were associated with strong Anti-cheating Beliefs is consistent

with the notion that students may hold high standards for themselves in more than one area. When both moral and academic standards are high, students are less likely to engage in cheating.

It is interesting that Academic Self-efficacy and Personal Achievement Goals did not show similar predictive patterns. Academic Self-efficacy was a significant predictor of Moral Disengagement but not of Anti-cheating Beliefs, and Personal Achievement Goals was a significant predictor of Anti-cheating Beliefs but not of Moral Disengagement. There was also a .36 correlation between Academic Self-efficacy and Personal Achievement Goals. Students with high Academic Self-efficacy would expect that they should receive high grades on the next report card. Likewise, students with high Personal Achievement Goals would only be satisfied if they received a high grade on the next report card. Thus, although one might expect these two variables to have similar predictive pattern with regard to Moral Disengagement and Cheating Beliefs, the findings from the present research do not support this idea. Instead, it was found that expectations of good grades inhibit the tendency to morally disengage, but the desire for good grades in terms of high academic standards is associated with strong anti-cheating standards.

Overall, the regression analyses provided additional evidence that the decision to cheat is contextually influenced. These findings support the findings from the path analysis of the main research model, in which context was shown to play an important role in student cheating via Moral Disengagement.

Expanded Model

There are several important points to be made regarding the findings from the expanded model. First, it is important point out the ways in which the expanded model aided in the overall goal of the present research, which was to begin to assess the utility of a moral

disengagement model of student cheating. One of the important advantages that the expanded path model has over separate regression analyses is that such a model allows for the simultaneous assessment of the contribution of each of the background variables to both Anti-cheating Beliefs and Moral Disengagement. In other words, each background variable is not expected to influence Anti-cheating Beliefs in the same way as it influences Moral Disengagement. For example, both Religiosity and Exam Preparedness were significant predictors of Moral Disengagement but not of Anti-cheating Beliefs. The regression analyses also were not able to incorporate the effect Anti-cheating beliefs on Moral Disengagement and vice versa.

The second point regarding the expanded model pertains to the nonsignificant paths in the analysis. Personal Achievement Goals failed to produce any significant paths in the analysis even though it was found to be a significant predictor of Anti-cheating Beliefs in the regression analysis. Similarly, Religiosity and Exam Preparedness were not significant predictors of Anti-cheating Beliefs in the path analysis although they were significant predictors in the regression analysis. It is difficult to hypothesize a reason for these findings since it is very early in the model building process and the addition of the background variables was done empirically (i.e., addition of a given variable improved the overall fit of the model to the data) rather than theoretically. Further research will be needed to replicate the relationship of the background variables to Anti-cheating Beliefs and Moral Disengagement. It is always the most difficult to explain "non-findings," to explain why a relationship *doesn't* exist. This task is even more difficult in a new area of research.

The third point of discussion pertains to the importance of context in model building. It is important to note that the proposed expanded model was composed of the original model with the addition of the selected background variables. Analysis of the expanded model

showed that all of the relationships from the original model (i.e., with the exception of the relationship between Self-reported Cheating and Self-reported Grades) were maintained when the background variables were added to the model. However, the strength of the relationship between Anti-Cheating Beliefs and Moral Disengagement was decreased by the presence of the background variables in the model; this relationship was .50 in the original model and .26 in the expanded model. The strength of the relationship between Moral Disengagement and Self-reported Cheating was also decreased by the presence of the background variables in the expanded model; this relationship was .60 in the original model and .43 in the expanded model. Although these relationships were weaker in the presence of the background variables, they were still fairly strong and in the expected direction. However, these findings are reminders that it is necessary to exercise care when selecting variables for inclusion in a path model because the presence of each variable influences the relationship among all other variables. These findings also emphasize the multifaceted nature of the context within which cheating occurs, and that adequate specification of the contextual elements associated with cheating is essential to model building.

The final point of discussion pertains to the process of constructing the expanded model. It is important to note that prior attempts to construct an expanded model that was adequately fit to the data were unsuccessful until direct paths were added between each background variable and Self-reported Cheating. These paths were added in a similar way to those that were previously added between the background variables and Anti-cheating Beliefs and Moral Disengagement. Thus, a direct path between a background variable and Self-reported Cheating was only added if it improved the fit of the model. There is already prior evidence in the literature that each of these variables is related to cheating behavior, which is the reason that they were selected for inclusion in the expanded model in the first place.

However, it was surprising that only the relationship of Self-reported Cheating to SRERC and Peers' Cheating was significant in the expanded model. Students who had greater self-efficacy to resist cheating and who felt that their classmates cheated infrequently were less likely to engage in cheating. The paths between Self-reported Cheating and Religiosity, Cheating Consequences, and Exam Preparedness were not significant in the analysis of the expanded model.

It is hypothesized that the reason that the direct paths between these three variables and Self-reported Cheating were not significant in the present analysis, despite the findings in the literature, was that the studies in the literature did not jointly consider these background variables. Again, it is always necessary to remember that the context of the analysis itself (i.e., the particular variables that are chosen for inclusion) can have a strong impact on the findings, as all variables in the analysis can influence each other. Thus, model building becomes an effort to specify, as completely as possible, the contextual factors that influence behavior.

Summary

The present research sought to extend Bandura's (e.g., 1999, 1990) notion of Moral Disengagement to the area of student cheating. The present research provided fairly strong evidence of the utility of a moral disengagement model of student cheating. It also provided evidence that Moral Disengagement mediates the relationship between students' beliefs that cheating is wrong and their willingness to engage in academically dishonest behavior. Students with weak beliefs that cheating is wrong were more likely to suspend their moral standards. Students who morally disengaged were more likely to report engaging in cheating. Moral Disengagement was associated with lower levels of guilt. Guilt reduction was thought to be the mechanism that allowed cheating to occur. Moral Disengagement decreased the guilt

or self-censure that would ordinarily accompany the violation of one's moral code that prohibits cheating.

The present research also found 5 background variables that influence Anti-Cheating Beliefs and Moral Disengagement: Religiosity, SRERC, Peers' Cheating, Cheating Consequences, and Exam Preparedness. Academic Self-efficacy, Personal Achievement Goals, and Parental Achievement Goals were not found to be significant predictors of Anti-cheating Beliefs and/or Moral Disengagement in the expanded model.

Educational Implications of A Moral Disengagement Model of Student Cheating

In the present research, it was found that moral disengagement may be a key factor in student cheating. Knowledge of the contextual factors that are more likely to motivate students to disengage their moral standards has important educational policy implications. Awareness of students' motivations for morally disengaging provides educators with a formalized means of counteracting their inclinations to disengage. For example, ensuring adequate proctoring of exams and a reasonable work load are two ways in which instructors could decrease the probability that students would morally disengage. Similarly, if educators make students aware of severe consequences for cheating and/or create an academic climate where students do not perceive cheating to be widespread among their peers, students may also be less likely to disengage. Evidence that Moral Disengagement plays a role in student cheating may indicate that instructors do not have to resign themselves to the beliefs that some students just have a "deficient moral belief system" that allows academic dishonesty. Knowledge of students' inclination to morally disengage may assist in the control of students' academically dishonest behavior.

The present findings are directly applicable to classroom behavior in that they may be used to develop training modules that would provide students with practice in identifying the

moral disengagement strategies that are commonly used in potential cheating situations.

Exposure to training regarding the proactive nature of the decision to morally disengage, as well as the specific means by which an individual may morally disengage, may deter academic dishonesty.

Goals of Future Research

There are two main questions that were left unanswered by the present research. The first question pertains to whether or not these findings would generalize to other samples of students. The second question is related to whether the list of background variables, or the contextual factors that influence cheating beliefs and moral disengagement, could be more complete. Thus goals of future research become model replication and specification.

In terms of the first goal, all findings from the present research must be replicated with other samples of students, particularly the findings of the main research model. The goal of replication is especially important in this new area of inquiry.

It is necessary to replicate these findings with public school students in order to rule out the possibility that parochial school students may have moral codes that differ in some way from those of public school students. The fact that it was necessary to limit the present research to parochial school students does have some potential implications for the external validity of the findings. An argument could be made that parochial school students are exposed to direct moral training. Also, the overt moral norms within parochial schools are expected to prohibit cheating, such that the social acceptability of cheating may not be as great in parochial schools.

These concerns are potentially valid ones, and they were thoroughly considered prior to undertaking the present research. However, the accessibility of public school students was of equal concern. Understandably, research on student cheating is controversial in the eyes of

many school administrators. As such, all public schools that were invited to participate in the present research declined to do so. Their decision to decline participation was also partially influenced by the fact that the present research simultaneously attempted to assess both cheating and student grades (even though the decision was finally made to assess self-reported grades, rather than actual grades). The parochial schools that did agree to participate were able to do so, presumably because they generally experience a greater degree of independence in their policy making than many public schools.

It is interesting that the principal of one of the participant schools viewed participation as part of the school's academic and religious mission. She stated to the author that, not only was it the school's duty to help further scientific inquiry, but it was also their duty to help those who are in need. Thankfully, this principal viewed the author as a "graduate student in need."

Clearly, it would be desirable to contrast the tendency to morally disengage in public and parochial school students. Nonetheless, the decision was made in the present research to proceed with the available sample, with the idea that this work would provide a starting point in this new area of cheating research.

Another aspect of replication pertains to the age of the research subjects. It is necessary to replicate these findings with students at various age levels. For example, it would be desirable to examine the tendency to morally disengage in younger children. Younger students may not be as adept at attending to the contextual features of potential cheating situations, and thus, they may be less likely to morally disengage and subsequently cheat. However, a potential limitation of attempting to replicate these findings with younger students is the need for a fairly high literacy level and a somewhat extended attention span, due to the length of the questionnaire. Modifications could be made to the questionnaire in order to make such a study possible.

The second main goal of future research must be better model specification.

Specifically, it is necessary to determine whether other background variables might show similar relationships to Anti-cheating Beliefs and Moral Disengagement. (Of course, it is also necessary to replicate the findings regarding the background variables from the present research.) The set of background variables included in the present research was not intended to be exhaustive. These variables were selected based upon the relationship that they showed to cheating in the literature, and the intention was to examine whether Moral Disengagement played a role in this relationship. Prior to the present research, there was no precedent for selecting the background variables that might influence cheating beliefs and the tendency to morally disengage. Certainly, other variables could have been included in addition to or instead of the ones that were selected.

Among the variables that could be included in future attempts to expand the model are School Importance and Socio-academic Affiliation. School Importance would be the degree to which students believe that it is important to participate in the academic process (e.g., Sternberg, 1996). Socio-academic Affiliation would be the degree to which one's close personal friends actively participate in the academic process. It could be hypothesized that students who have personally adopted the belief that active participation in the academic process is important and who have friends who actively participate in this process would be less likely to engage in cheating (Sternberg, 1996), presumably because they would be less likely to morally disengage (Bandura, 1999).

Appendix A

Part I:

1. What is your grade in school?

7th grade 8th grade

2. What is your age? I am _____ years and _____ months old.

3. Sex: Male Female

4. Please rate how strongly you agree or disagree with the following statement:

"I am a religious person."

Strongly Disagree

Disagree

Undecided

Agree

Strongly Agree

5. I usually go to church:

Do not go to church

Once or Twice a Year

Once a Month

Once a Week

Every Day

6. The grades I get in most classes are:

90% or Above

80-89%

70-79%

60-69%

Below 60%

7. When I study for an exam, I usually feel that the amount of time I have spent studying is:

Much more than is necessary.

Somewhat more than is necessary.

Exactly the amount that is necessary.

Somewhat less than is necessary.

Much less than is necessary.

8. If you cheated on a test, how likely is it that you would be caught?

- Very Certain
- Somewhat Certain
- Undecided (I might get caught and I might not.)
- Somewhat Unlikely
- Very Unlikely

9. If you were caught cheating on a test, your punishment would probably be:

- Extremely Severe
- Somewhat Severe
- Moderate
- Somewhat Mild
- Very Mild

10. Please rate how strongly you agree/disagree with the following statement:

"If I cheated on a test, I would feel guilty."

- Strongly Agree
- Agree
- Undecided (Neither agree nor disagree)
- Disagree
- Strongly Disagree

11. If one of your peers (i.e., classmates or friends) were pressuring you to cheat on an exam or an assignment, how strongly would you rate your ability to resist that pressure to cheat?

- Very strong (I am certain that I could resist the pressure.)
- Fairly strong (I could probably resist the pressure to cheat.)
- Undecided (I might resist the pressure, or I might not.)
- Fairly weak (I probably could not resist the pressure to cheat.)
- Very weak (I am certain that I could NOT resist the pressure.)

12. Cheating on your school work is _____.

- Never wrong.
- Sometimes wrong.
- Always wrong.

13. Please complete the following statement.

"I believe that cheating in my school work is _____."

- Not immoral at all.
- Only slightly immoral.
- Somewhat immoral.
- Very immoral.

Part II:

DIRECTIONS: How often do **YOU** do each of the things described in the 16 phrases below? Please answer using the following scale:

- 1 = Very Often
- 2 = Often
- 3 = A Few Times
- 4 = Hardly Ever
- 5 = Never

- ___ 1. Not reporting a grading mistake to the teacher, which results in a higher grade.
- ___ 2. Using crib notes (includes writing on note paper, desk, hands, etc.).
- ___ 3. Looking at a notebook/textbook during a test, even when told by the teacher not to do so.
- ___ 4. Giving information about what was on a test to a student in a later class period.
- ___ 5. Receiving information about what was on a test from a student in an earlier class period.
- ___ 6. Giving answers to another student during a test.
- ___ 7. Copying answers from another student during a test.
- ___ 8. Getting a copy of the test before the test is even given.
- ___ 9. When writing a report, copying material word for word from a reference book but not giving the author credit.
- ___ 10. Having a family member do an assignment.
- ___ 11. Having a friend do an assignment.
- ___ 12. Having someone help with an assignment when the teacher specifically said to work alone.
- ___ 13. Using tools such as calculators to complete an assignment when the teacher specifically said not to use them.
- ___ 14. Doing an assignment for another student.
- ___ 15. Copying an assignment from another student.
- ___ 16. Handing in the same report to two different teachers, in two different school years.

Part III:

DIRECTIONS: How often do **OTHER STUDENTS** in your school do each of the things described in the 16 phrases below? Please answer using the following scale:

- 1 = Very Often
- 2 = Often
- 3 = A Few Times
- 4 = Hardly Ever
- 5 = Never

- ___ 1. Not reporting a grading mistake to the teacher, which results in a higher grade.
- ___ 2. Using crib notes (includes writing on note paper, desk, hands, etc.).
- ___ 3. Looking at a notebook/textbook during a test, even when told by the teacher not to do so.
- ___ 4. Giving information about what was on a test to a student in a later class period.
- ___ 5. Receiving information about what was on a test from a student in an earlier class period.
- ___ 6. Giving answers to another student during a test.
- ___ 7. Copying answers from another student during a test.
- ___ 8. Getting a copy of the test before the test is even given.
- ___ 9. When writing a report, copying material word for word from a reference book but not giving the author credit.
- ___ 10. Having a family member do an assignment.
- ___ 11. Having a friend do an assignment.
- ___ 12. Having someone help with an assignment when the teacher specifically said to work alone.
- ___ 13. Using tools such as calculators to complete an assignment when the teacher specifically said not to use them.
- ___ 14. Doing an assignment for another student.
- ___ 15. Copying an assignment from another student.
- ___ 16. Handing in the same report to two different teachers, in two different school years.

Part IV:

DIRECTIONS: Please rate how strongly you agree or disagree with each of the 32 sentences below. Use the following scale to make your ratings.

- 1 = Strongly Agree
- 2 = Agree
- 3 = Neither Agree or Disagree
- 4 = Disagree
- 5 = Strongly Disagree

- ___ 1. It is all right to help your friends by allowing them to look at your paper during a test.
- ___ 2. Providing your friends with answers to test questions is really just a way of doing a favor.
- ___ 3. Looking at a few answers on another student's test paper is no big deal when you consider that other students are doing things that are even more dishonest.
- ___ 4. Students found copying answers during a test shouldn't be punished if a lot of other students are doing it too.
- ___ 5. If a student has a lot of friends who cheat in school, s/he cannot be blamed for cheating too.
- ___ 6. It's all right to copy a few paragraphs from a reference book when you are writing a report because it really doesn't do any harm.
- ___ 7. Teachers who don't deserve any respect should not expect student honesty.
- ___ 8. If students cheat, it's mainly the teacher's fault.
- ___ 9. It is all right to cheat in a class where the teacher is unfair to you.
- ___ 10. Handing in a report that your older brother or sister wrote is a good way to "teach a lesson" to a teacher who gives too many assignments.
- ___ 11. Copying some parts of a class assignment from another student is not too serious when compared to copying the whole assignment.
- ___ 12. A student who talks about the benefits of cheating should not be blamed if other students actually go ahead and do it.
- ___ 13. If students are not disciplined, they should not be blamed for cheating.
- ___ 14. Doing your friend's homework for him/her isn't really wrong if you're doing it because s/he doesn't understand the work.
- ___ 15. It is all right to copy your friend's homework if the teacher assigns too much work.
- ___ 16. If students are careless and leave their exam papers where other students can see them, then it is their own fault if someone copies from them.

- 17. It is all right to cheat when you are in danger of failing a class.
- 18. Copying a few paragraphs from a reference book for your report is OK if the author of the book just knows how to "say things in a better way."
- 19. It is better to give a student an answer to a test question because stealing an answer from another student is even worse.
- 20. If a group of students jointly decides to copy an assignment, it is unfair to blame any (one) student in the group for it.
- 21. Students should not be blamed for sharing the answers to a homework assignment because that's just something that everyone does.
- 22. It is all right to cheat if the teacher doesn't care whether the students learn the material or not.
- 23. Teachers who are very strict about grading should expect that students are going to cheat in their class.
- 24. If a teacher leaves the room during a test, s/he is almost asking the students to cheat.
- 25. If your parents get angry when you get a very low grade, it is all right to cheat.
- 26. It is not bad if you copy some answers to test questions, as long as you don't do it too often.
- 27. Compared to the other dishonest things students do, taking a quick look at your notebook during a test is not very serious.
- 28. It is unfair to blame a student who had only a small part in cheating done by others.
- 29. Students should not be blamed for cheating if their friends pressured them to do it.
- 30. Copying another student's work doesn't really hurt anyone.
- 31. In some classes students have to cheat because teachers don't teach well.
- 32. Students should not be at fault for cheating if their parents expect too much from them in school.

Part V:

A. Directions: How satisfied/dissatisfied would **YOU** be with each of the following grades? Use the scale below to make your ratings.

- 1 = Very Dissatisfied
- 2 = Somewhat Dissatisfied
- 3 = A Little Dissatisfied
- 4 = Undecided (Neither satisfied nor dissatisfied)
- 5 = A Little Satisfied
- 6 = Somewhat Satisfied
- 7 = Very Satisfied

- 1. A+ _____
- 2. A _____
- 3. A- _____
- 4. B+ _____
- 5. B _____
- 6. B- _____
- 7. C+ _____
- 8. C _____
- 9. C- _____
- 10. D+ _____
- 11. D _____
- 12. F _____

B. Directions: How satisfied/dissatisfied would **YOUR PARENTS** be if you received each of the following grades? Use the scale below to make your ratings.

- 1 = Very Dissatisfied
- 2 = Somewhat Dissatisfied
- 3 = A Little Dissatisfied
- 4 = Undecided (Neither satisfied nor dissatisfied)
- 5 = A Little Satisfied
- 6 = Somewhat Satisfied
- 7 = Very Satisfied

- 1. A+ _____
- 2. A _____
- 3. A- _____
- 4. B+ _____
- 5. B _____
- 6. B- _____
- 7. C+ _____
- 8. C _____
- 9. C- _____
- 10. D+ _____
- 11. D _____
- 12. F _____

Part VI:

How certain are you that you will receive each of the following grades as an overall average on your next report card? Use the scale below to make your ratings of certainty.

- 1 = Highly Certain
- 2 = Moderately Certain
- 3 = Certain
- 4 = Undecided (Neither certain or uncertain)
- 5 = Uncertain
- 6 = Moderately Certain
- 7 = Highly Uncertain

1. I am _____ that I will receive at least an overall average of **A+** on the next report card.
2. I am _____ that I will receive at least an overall average of **A** on the next report card.
3. I am _____ that I will receive at least an overall average of **A-** on the next report card.
4. I am _____ that I will receive at least an overall average of **B+** on the next report card.
5. I am _____ that I will receive at least an overall average of **B** on the next report card.
6. I am _____ that I will receive at least an overall average of **B-** on the next report card.
7. I am _____ that I will receive at least an overall average of **C+** on the next report card.
8. I am _____ that I will receive at least an overall average of **C** on the next report card.
9. I am _____ that I will receive at least an overall average of **C-** on the next report card.
10. I am _____ that I will receive at least an overall average of **D+** on the next report card.
11. I am _____ that I will receive at least an overall average of **D** on the next report card.
12. I am _____ that I will receive an overall average of **F** on the next report card.

References

- Aaron, R.M. & Georgia, R.T. (1994). Administrator perceptions of student academic dishonesty in collegiate institutions. NASPA Journal, 31, 83-91.
- Aidala, A.A. & Greenblat, C.S. (1986). Changes in moral judgments among student populations: 1929-1983. Youth & Society, 17, 221-235.
- Aiken, L.R. (1991). Detecting, understanding, and controlling for cheating on tests. Research in Higher Education, 32, 725-735.
- Asendorf, J.B. & Nunner-Winkler, G. (1992). Children's moral motive strength and temperamental inhibition reduce their immoral behavior in real moral conflicts. Child Development, 63, 1223-1235.
- Austin, R.L. (1977). "Commitment, neutralization, and delinquency." Pp. 119-137 in T.N. Ferdinanc (Ed.), Juvenile Delinquency: Little Brother Grows Up. Beverly Hills: Sage.
- Bandura, A. (1978). Social Learning theory of aggression. Journal of Communication, 28, 12-29.
- Bandura, A. (1990). Selective activation and disengagement of moral control. Journal of Social Issues, 46, 27-46.
- Bandura, A. (1991). Social cognitive theory of moral thought and action. In W. M. Kurtines & J. L. Gewirtz (Eds.), Handbook of Moral Behavior and Development Volume 1: Theory (pp. 45-103). Hillsdale, N.J.: Lawrence Erlbaum.
- Bandura, A. (1996a). Mechanisms of moral disengagement in the exercise of moral agency. Journal of Personality and Social Psychology, 71, 364-374.
- Bandura, A. (1996b). Multifaceted impact of self-efficacy beliefs on academic functioning. Child Development, 67, 1206-1222.

- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. Personality and Social Psychology Review, 3, 193-209.
- Barnett, D.C. & Dalton, J.C. (1981). Why college students cheat. Journal of College Student Development, 22, 545-551.
- Beatty, J. (1992). For honor's sake: Moral education, honor systems, and the informer-rule. Educational Theory, 42, 39-50.
- Belleza, F.S. & Belleza, S.F. (1995). Detection of copying on multiple-choice tests: An update. Teaching of Psychology, 22, 180-182.
- Bunn, D.N., Caudill, S.B., & Gropper, D.M. (1992). Crime in the classroom: An economic analysis of undergraduate student cheating behavior. Journal of Economic Education, 23, 197-207.
- Calabrese, R.L. & Cochran, J.T. (1990). The relationship of alienation to cheating among a sample of american adolescents. Journal of Research and Development in Education, 23, 65-72.
- Colby & Kohlberg (1987).
- Daniel, L.G., Blount, K.D., & Ferrell, C.M. (1991). Academic misconduct among teacher education students: A descriptive-correlational study. Research in Higher Education, 32, 703-723.
- Davis, S. G., Grover, C. A., Becker, A. H., & McGregor, L. N. (1992). Academic dishonesty: Prevalence, determinants, techniques, and punishments. Teaching of Psychology, 19, 16-20.
- Davis, S.F. & Ludvigson, W.H. (1995). Additional data on academic dishonesty and a proposal for remediation. Teaching of Psychology, 22, 119-121.

Dwyer, D.J. & Hecht, J.B. (1994). Cheating detection: Statistical, legal, and policy implications. Unpublished manuscript.

Dwyer, D.J. & Hecht, J.B. (1996). Using statistics to catch cheaters: Methodological and legal issues for student personnel administrators. NASPA Journal, 33, 125-135.

Enker, M.S. (1987). Attitudinal and normative variables as predictors of cheating behavior. Journal of Cross-Cultural Psychology, 18, 315-329.

Evans, E. D. & Craig, D. (1990). Teacher and student perceptions of academic cheating in middle and senior high schools. Journal of Educational Research, 84, 44-52.

Evans, E. D., Craig, D., & Mietzel, G. (1991, April). Adolescent's cognitions and attributions for academic cheating: A cross-national study. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA.

Eve, R.A. & Bromley, D.G. (1981). Scholastic dishonesty among college undergraduates. Youth & Society, 13, 3-22.

Fass, R.A. (1986). By honor bound: Encouraging academic dishonesty. Educational Record, 17(4), 32-35.

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

Graham, M. A., Monday, J., O'Brien, K., & Steffen, S. (1994). Cheating at small colleges: An examination of student and faculty attitudes and behaviors. Journal of College Student Development, 35, 255-260.

Greene, A.S. & Saxe, L. (1992, April). Everybody (else) does it: Academic cheating. Paper presented at the Annual Meeting of the Eastern Psychological Association, Boston, MA.

Guttman, J. (1984). Cognitive morality and cheating behavior in religious and secular school children. Journal of Educational Research, 77, 249-254.

Haines, V. J., Diekhoff, G. M., LaBeff, E. E., & Clark, R. E. (1986). College cheating: Immaturity, lack of commitment, and the neutralizing attitude. Research in Higher Education, 25, 342-354.

Hartshorne, M. & May, M.A. (1930). Studies in Deceit: Vol. 3. Studies in the Organization of Character. New York: Macmillan.

Houston, J.P. (1976). Learning and cheating as a function of study phase distraction. The Journal of Educational Research, 69, 247-249.

Houston, J.P. (1977). Cheating behavior, anticipated success-failure, confidence, and test importance. Journal of Educational Psychology, 69, 55-60.

Houston, J.P. (1978). Curvilinear relationships among anticipated success, cheating behavior, temptation to cheat, and perceived instrumentality of cheating. Journal of Educational Psychology, 70, 758-762.

Houston, J.P. & Ziff, T. (1976). Effects of success and failure on cheating behavior. Journal of Educational Psychology, 68, 371-376.

Jendrek, M.P. (1992). Students' reactions to academic dishonesty. Journal of College Student Development, 33, 260-273.

Karlins, M., Michaels, C., & Podlogar, S. (1988). An empirical investigation of actual cheating in a large sample of undergraduates. Research in Higher Education, 29, 359-364.

Kibler, W.L. (1994). Addressing academic dishonesty: What are institutions of higher education doing and not doing? NASPA Journal, 31, 92-101.

Kline, R.B. (1998). Principles and practice of structural equation modeling. New York: Guilford.

Leming, J.S. (1980). Cheating behavior, subject variables, and components of the internal-external scale under high and low risk conditions. Journal of Educational Research, 74, 83-87.

Lewis, K.H. & Hartnett, J.J. (1983, March). Sex differences in the perception of male/female unethical behavior. Paper presented at the Annual Meeting of the Southeastern Psychological Association, Atlanta, GA.

Malarkey, C.J. & Aiken, L.R. (1986, November). Survey of testing practices. Paper presented at the Annual Meeting of the California Educational Research Association, Marina del Rey, CA.

Maramark, S. & Maline, M.B. (1993). Academic dishonesty among college students. Issues in education. Office of Educational Research and Improvement, Washington, D.C.

Marsh, R. (1988, November). An effect of unstructured evaluation on academic integrity. Paper presented at the Annual Meeting of the Mid-South Educational Research Association, Louisville, KY.

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

McCabe, D.L. & Bowers, W.J. (1994). Academic dishonesty among males in college: A thirty year perspective. Journal of College Student Development, 35, 5-10.

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

Michaels, J. W. & Miethe, T. D. (1989). Applying theories of deviance to academic cheating. Social Science Quarterly, 70, 871-885.

Millham, J. (1974). Two components of need for approval score and their relationship to cheating following success and failure. Journal of Research in Personality, 8, 378-392.

- Minor, W.W. (1980). The neutralization of criminal offense. Criminology, 18, 103-120.
- Minor, W.W. (1984). Neutralization as a hardening process: Considerations in the modeling of change. Social Forces, 62, 995-1019.
- Mischel & Mischel (1975).
- Moffatt, M. (1990). Undergraduate cheating. Unpublished manuscript, Rutgers University, New Brunswick, NJ.
- Nuss, E.M. (1996, February). What colleges teach students about moral responsibility? Putting the honor back in student honor codes. Paper presented at the Annual Meeting of the Institute of College Student Values, Tallahassee, FL.
- Pavela, G. & McCabe, D. (1993). The surprising return of honor codes. Planning for Higher Education, 21, 27-32.
- Regoli, R.M. & Poole, E.D. (1978). The commitment of delinquents to their misdeeds: A re-examination. Journal of Criminal Justice, 6, 261-268.
- Roberts, D. & Rabinowitz (1992). An investigation of student perceptions of cheating in academic situations. The Review of Higher Education, 15, 179-190.
- Roig, M. & Ballew, C. (1992, April). Attitudes toward cheating by college students and professors. Paper presented at the Annual Meeting of the Eastern Psychological Association, Boston, MA.
- Rosch, E. & Mervis, C.B. (1975). Family resemblances: Studies in the internal structure of categories. Cognitive Psychology, 7, 573-605.
- Schab, F. (1991). Schooling without learning: Thirty years of cheating in high school. Adolescence, 26, 839-847.
- Scheers, N.J. & Dayton, C.M. (1987). Improved estimation of academic cheating behavior using the randomized response technique. Research in Higher Education, 26, 61-69.

Shaughnessy, M. F. (1988). The psychology of cheating behavior. (Tech. Rep. No. 143). Portales, New Mexico: Eastern New Mexico University, Psychology Department.

Sierles, F.S., Kushner, B.D., & Krause, P.B. (1988). A controlled experiment with a medical student honor system. Journal of Medical Education, *63*, 705-712.

Simpson, D.E., Yindra, M.S., Towne, J.B., & Rosenfeld, P.S. (1989). Medical students' perceptions of cheating. Academic Medicine, *64*, 221-222.

Sisson, E. & Todd-Macillas, W.R. (1984, March). Cheating in engineering courses: Short- and long-term consequences. Paper presented at the Annual Meeting of the Midwest Section of the American Society of Engineering Education, Wichita, NE.

Stanwyk, D.J. & Abdelal, P. (1984, February). Attitudes toward cheating behavior in the ESL classroom. Paper presented at the Annual Meeting of the Eastern Educational Research Association, West Palm Beach, FL.

Stenberg, L. (1996). Beyond the classroom: Why school reform has failed and what parents need to do. New York: Simon & Schuster.

Sutton, E.M. & Huba, M.E. (1995). Undergraduate student perceptions of academic dishonesty as a function of ethnicity and religious participation. NASPA Journal, *33*, 19-34.

Sykes, G. M. & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. American Sociological Review, *22*, 664-670.

Tittle, C.R. & Rowe, A.R. (1974). Fear and the student cheater. Changes, *6*(3), 47-48.

Vitro, F.T. & Schoer, L.A. (1972). The effects of probability of test success, test importance, and risk of detection on the incidence of cheating. Journal of School Psychology, *10*, 269-277.

Ward, D.A. & Beck, W.L. (1990). Gender and dishonesty. The Journal of Social Psychology, 130, 333-339.

Wilhoit, S. (1995). Helping students avoid plagiarism. College Teaching, 42, 161-165.

Zimmerman, B.J. & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. American Educational Research Journal, 31, 845-862.