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ACADEMIC DISHONESTY AS DEFINED AND REPORTED BY STUDENTS AND FACULTY FROM SELECTED COLLEGES AT MICHIGAN STATE UNIVERSITY

By

Ruth Eileen Renaud

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ABSTRACT

ACADEMIC DISHONESTY AS DEFINED AND REPORTED BY STUDENTS AND FACULTY FROM SELECTED COLLEGES AT MICHIGAN STATE UNIVERSITY

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The study was conducted primarily to gain an understanding of how students and faculty at Michigan State University define academic dishonesty and to secure information regarding the incidence of dishonesty among students. Effort was also made to explore the conditions which students believe existed when dishonesty occurred and the actions which faculty took when dishonesty was discovered.

A two-part questionnaire was developed by the researcher. Part I was designed to measure how faculty and students, both undergraduates and graduates, perceived 33 selected behaviors in relationship to what they personally considered an appropriate standard for academic work. The 33 items formed a single scale which was found reliable for the three groups under study. Part II included ten behaviors governed by University regulations on scholarship and grades. Engaging in any one of these behaviors was considered an act of dishonesty. Students were asked to report if they had observed or personally engaged in any of the behaviors and, if so, on how many occasions. Faculty were also asked if they had discovered any of the behaviors and, if so, on how many occasions. The reporting period was one academic year.

Students who self-reported dishonesty were asked to indicate the conditions which they believe existed when the behavior occurred. Faculty who reported dishonesty were asked to indicate what action, if any, was taken.

A random sample of 1,529 students and 150 faculty from the colleges of Business, Natural Science, and Social Science was selected. The returned questionnaires of 740 students and 66 faculty provided the data used in the analysis. One-way analysis of variance tests were used to test for significant differences among groups in both perceptions and dishonesty reported. Scheffé post hoc comparisons were made where significant differences were found.

As measured by the overall scale, faculty perceived the behaviors significantly more seriously than both undergraduate and graduate students. No significant difference was found between the perceptions of undergraduates and graduates, nor were there significant differences among faculty when categorized by college or years of teaching experience.

Regarding perceptions by individual behaviors, faculty rated most, but not all, behaviors more seriously than students. In general, however, differences were more in degree than direction.

Undergraduate and graduate women perceived the behaviors as more serious than their male peers. In general, upperclassmen rated behaviors as more serious than underclassmen, and students with higher GPA's rated the behaviors as more serious than those with lower GPA's. Students in Natural Science rated behaviors more seriously than those

in Social Science and Business, with a significant difference found between those in Natural Science and Business.

Fifty-seven percent of all student respondents (64 percent of the undergraudates, 27 percent of the graduates) reported having engaged in one or more acts of dishonesty during the academic year. While significant differences were found in self-reported dishonesty among undergraduates, dishonesty was relatively consistent regardless of sex, class, or GPA. No significant differences were found among graduates. Students who self-reported dishonesty reported significantly more dishonesty among other students, and perceived the behaviors as significantly less serious, than did those not self-reporting dishonesty.

The majority of students who engaged in dishonesty reported that they believed there was little chance of their behavior being discovered. Few students reported that honesty was stressed by their instructors.

Considerable variance was found in actions taken by faculty when a specific dishonest behavior was discovered; however, the researcher recommends that more extensive study of the observations and actions of faculty be undertaken.

ACKNOWLEDGMENTS

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To the students and faculy who participated in the study, the writer is deeply indebted.

Colleagues and friends in the Judicial Programs Office have given freely of their time and talent to make this study possible. Without their help it would never have been undertaken, and most surely, never completed.

Special gratitude is expressed to family and friends whose love and concern makes an undertaking worthwhile.

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CHAPTER I

THE PROBLEM

Introduction

Members of a university community may disagree about why they believe honesty is important in academic work, yet few contend that it is not. For most faculty and staff the emphasis on honesty is based on the concern for the integrity of the learning process and the stability of the educational system (Harp & Taietz, 1966). Whether it is in the area of research, teaching, or in the evaluation of a student's work, honesty is seen as central to the process. The concern for honesty on the part of students may be more practical in nature since some may believe that dishonesty creates situations of unfair advantage in a highly competitive marketplace. Whether the concern is based on personal convictions or practical considerations, faculty and students generally agree, however, that dishonesty is a contravention of a legitimate standard for academic work (Bowers, 1964). In spite of the stated standard, acts of dishonesty on college campuses are frequently reported.

The popular press in recent years has given attention to dishonesty by reporting such matters as the development of commercial term paper companies and the discovery of mass cheating at individual institutions. The professional literature has for the past four

decades consistently reported a high incidence of dishonesty among undergraduate students at institutions across the country. In a comprehensive nationwide survey done in 1964 (Bowers), 49 percent of the students self-reported cheating behaviors. Although the reports of other studies vary somewhat, depending upon the populations studied and the methodology used, little evidence was found to support the position that acts of dishonesty are isolated behaviors. In spite of these findings, members of university communities grossly underestimate the incidence of dishonesty (Bowers) and many continue to assume honesty on the part of students when such an assumption has been shown to be fallacious.

The dichotomy between the standard of honesty which is articulated and the practices which are reported was noted early in a study by James (1933). He concluded that the dichotomy was so great and of such a vital nature that further study was needed to substantiate his findings. Subsequent research supports the dichotomy, and the question of why students cheat when they state they believe cheating is wrong has been the subject of much speculation and considerable research.

Statement of the Problem

Michigan State University, through its system of academic governance, has adopted a policy statement on the integrity of scholarship and grades which stipulates that "the principles of truth and honesty are recognized as fundamental to a community of

teachers and scholars" (MSU, 1977-78, pp. 35-36). The statement further states that the University expects that both faculty and students will honor these principles and in so doing protect the validity of the University grading system. Faculty are charged with the responsibility to exercise care in the supervision of academic work so that honesty "will be positively encouraged." The expectation for honesty on the part of students is set forth in General Student Regulations governing scholarship and grades (MSU, 1977-79, p. 33). These regulations are as follows:

> 4.01 No student shall knowingly, without proper authorization, procure, provide or accept any materials which contain questions or answers to any examination or assignment to be given at a subsequent date.
>
> 4.02 No student shall, without proper authorization, complete in part or in total, any examination or assignment for another person.
>
> 4.03 No student shall, without proper authorization, knowingly allow any examination or assignment to be completed, in part or in total, for him or her by another person.
>
> 4.04 No student shall knowingly plagiarize or copy the work of another person and submit it as his or her own.

Although the statement of principle is clear and the general expectations for faculty and students are fairly well defined, little is known about how the principle is supported, or not supported, by the attitude and actions of faculty and students. Central to this study is an examination of those attitudes and actions.

The Purpose and Importance of the Study

The study is undertaken in an effort to secure information which can assist members of the Michigan State University community in their efforts to promote and protect honesty in academic work. In the absence of better information as to how dishonesty is defined, its prevalence among students, the conditions under which students believe dishonesty occurs, and the response of faculty when it is discovered, it is difficult for students, faculty, and staff to direct their concerted effort to further the principles of truth and honesty which are set forth as being fundamental to the community. A lack of concern for honesty in academic work, or a lack of commitment to operationalize a concern by members of the university community, could seriously undermine the integrity of the educational process itself. If expectations for honesty in academic work can be better defined and communicated, if individuals better understand the implications and consequences of dishonest behaviors as well as the extent to which dishonesty occurs, perhaps those who believe honesty is fundamental to the learning process will be better able to act in furtherance of their position.

This study is only exploratory in nature. Dishonesty is examined from a number of perspectives; however, the focus for the study is an examination of how dishonesty is defined, how seriously behaviors are viewed, and the incidence of dishonesty among students. Although previous studies have examined many of the questions that will be addressed in this study, a review of the literature revealed

few studies which have examined the topic from a number of perspectives with the specific purpose of hoping to impact the population under study. The model of the study may be of value to other educational institutions which share a common concern for honesty in academic work. Although caution must be exercised in generalizing the results beyond the sample under study, the findings themselves may provide information which will be of value to members of other institutions similar in nature to Michigan State University.

Four objectives were developed to provide direction for the study. These objectives and the rationale for their formulation are as follows:

1. To examine how faculty and students perceive specific behaviors in relationship to what they believe is an appropriate standard of academic work. Although previous studies report general agreement among students (Anderson, 1957) and between students and faculty (Frymier, 1960) on what behaviors constitute acts of dishonesty, these studies also report that there are some behaviors about which there is disagreement or uncertainty. In the absence of a better understanding of what is acceptable behavior and how seriously certain behaviors are viewed, both faculty and students will find it difficult to know what is expected of them and what they could reasonably anticipate should certain behaviors occur.

2. To assess how prevalent academic dishonesty is among students from selected colleges at Michigan State University. While estimates of the incidence of dishonesty could be made based on

previous studies of other populations, members in a university community, as previously noted, often underestimate the incidence of dishonesty. In a practical sense, the commitment of faculty and students to promote and protect honesty may be contingent upon the extent to which they see dishonesty to be a problem within the environment within which they work or study.

3. To examine the students' perceptions of the situations in which they engaged in academic dishonesty. As noted previously, considerable research has been done on situational variables and their relationship to dishonesty. For purposes of this study, however, students were asked to respond with their perceptions of the situations as they relate to course content, the instructor, classmates, and their own status. While many of these variables have been examined previously, response to the combination of variables may provide an insight into the relationships between situations and dishonest behaviors. By better understanding the conditions under which dishonesty occurs, it may be possible to structure situations which will encourage honesty.

4. To determine what actions, if any, are taken by instructors when they observe or discover dishonesty. The extent to which instructors are consistent in the application of University standards, and in the actions which they take if those standards are violated, may or may not communicate to students the same expectation which is articulated. If the University is committed to honesty in academic work, that commitment may well need to be communicated in practice as well as in a statement of policy.

From these objectives the following questions were developed to provide further focus for the study:

1. Are there significant differences between students and faculty in their perceptions of behaviors which violate an appropriate standard for academic work?
2. Are there significant differences among students in their perceptions of behaviors which violate an appropriate standard for academic work when categorized by class standing, college, grade point average, or sex?
3. Are there significant differences among faculty in their perceptions of behaviors which violate an appropriate standard for academic work when categorized by college, sex, or years of college teaching experience?
4. What are the characteristics of the behaviors which are perceived by students and faculty to be serious violations of an appropriate standard for academic work?
5. Are there significant differences among students in the incidence of self-reported dishonesty when categorized by class standing, college, grade point average, sex, or place of residence?
6. Is there a significant relationship between a student's perception of what constitutes a violation of an appropriate standard for academic work and dishonesty self-reported?
7. Do the conditions which students believe exist when they engage in acts of dishonesty differ by the specific type of behavior in which they engage?

8. Is there a significant relationship between the self-reporting of dishonesty by students and their reporting of dishonesty by others?
9. Do faculty differ in the actions which they take when a specific type of dishonesty is observed or discovered?

Although a number of research hypotheses could be developed where tentative predictions of direction could be stipulated based on previous research, this study will explore some areas where there is little basis in research or theory for prediction. The review of the literature will include the findings on which tentative predictions could be based; however, these will not be incorporated into research hypotheses. Rather, all hypotheses will be stated in null or non-directional form in Chapter III.

Scope and Limitations of the Study

Certain limitations and parameters are identified which should be considered in interpreting this study.

The population surveyed was limited to a sample of students and faculty from 3 of 17 colleges at Michigan State University. The three, Business, Natural Science and Social Science, are the three largest colleges and were selected because of the wide variety of programs which they offer. Of the largest colleges, these three also had student populations most evenly matched in terms of undergraduate and graduate enrollments. Although care was taken in selecting a

sample that might be reasonably representative of Michigan State University students and faculty, the findings reported should be considered within the parameters of the responses of the students and faculty who returned the questionnaires, and caution must be exercised in generalizing the findings to the total populations of the colleges selected for the study as well as the total University population of students and faculty.

Because the study is exploratory in nature, it represents only an initial effort to examine how an institution might promote and protect honesty in academic work. A number of areas relating to academic dishonesty were investigated to provide a broad perspective on the topic, and an in-depth examination of some areas was not undertaken. Particular attention was focused on the development of an instrument to assess how students and faculty defined behaviors in terms of what constitutes dishonesty, how seriously selected behaviors are viewed, and the incidence of dishonesty among students.

It must be taken into consideration that the incidence of dishonesty reported is based on behaviors which are self-reported or reported by other students and faculty, and not on the basis of experimental study. The extent to which the incidence of dishonesty reported in this study reflects the true incidence of dishonesty is further brought into question by the use of a questionnaire, in that those who respond are essentially volunteering information and their responses may differ from the nonresponding subjects.

It was determined by the researcher that a 40 percent return on the questionnaires would be necessary to provide data sufficient for analysis. A 40 percent return is not uncommon with mailed questionnaires (Kerlinger, 1964). Because information sought could have been interpreted as sensitive or threatening, and because the questionnaire itself was fairly extensive and was sent late in spring term when the schedules of students and faculty may have been unusually busy, the 40 percent target for return was considered to be reasonable. Forty-eight percent of the students and 44 percent of the faculty members in the sample returned questionnaires which provided the data on which the analysis was made.

Use of the questionnaire also assumes that each respondent understands the intent of each question; that the response is honest; that it reflects the intent of the respondent; and that responses are correctly interpreted by the researcher. Such assumptions may not always be accurate.

Despite the limitations noted, the results of this investigation should provide worthwhile information to those concerned with academic dishonesty at Michigan State University by giving a general picture of the attitudes and actions of students and faculty relating to dishonesty. More important may be the testing of an instrument for its worth in assessing perceptions of behaviors appropriate to academic work.

Although it is not viewed as a limitation to the study, it is noted that the researcher, in addition to being a graduate student

at Michigan State University, has also been a staff member for nine years with the Judicial Programs Office under the Office of the Vice President for Student Affairs and Services. During that period of time there were contacts with both students and faculty on specific academic dishonesty issues. Whether either the rate of return of questionnaires or the responses provided were in any way influenced by the staff role of the researcher is unknown; however, because the contacts were limited and the nature of the contacts did not include decision-making responsibility, the staff role of the researcher is not seen as a limitation to the study. It is noted here, however, should there be an interest in, or need for examining this variable in subsequent investigation.

Organization of the Study

This study is presented in five chapters. Chapter I includes an introduction to the study, the statement of the problem, followed by the purpose and importance of the study and the objectives and questions to be addressed. The scope and limitations which should be considered in interpreting the study are also presented, as is an outline of the organization of the study.

Chapter II presents a selected review of literature related to the topic. The review focuses on research which was undertaken to examine dishonesty among students in higher education institutions. Particular attention is given to those studies which have investigated situational variables related to dishonesty and the personal

characteristics of those individuals who engage in behaviors categorized as dishonest.

Chapter III describes the design of the study and presents detailed information regarding the development of the questionnaire, the population and the sample, and the methods used in collecting the data. Also included are the hypotheses to be tested and a definition of terms used in the analysis of the data.

Chapter IV includes a presentation of data collected, its analysis and interpretation. The results of the testing of each hypothesis are presented in the order outlined in Chapter III.

Chapter V summarizes the findings of the study, presents the conclusions drawn by the researcher, and suggests possible implications of those conclusions. Recommendations for further study are also included.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Dishonesty in academic work has been examined extensively and within many disciplines. In 1966 a bibliography was published which included a listing of over 400 books, pamphlets, journals, and newspaper articles related to the topic (Shurtleff). Since that time considerably more investigation has taken place and the literature has increased greatly. No attempt is made in this chapter to review all the related literature; rather, that research which relates to dishonesty among college and university students will be reported. With the exception of two early studies which, in the opinion of the writer, provided a basis for much of the subsequent research, this review of the literature will focus on studies which have been conducted since 1960. Within many of these studies different types of variables have been examined, thus making it difficult to develop distinct categories within which the studies can be reported. While the review reports studies by category, the categories are not mutually exclusive. In reporting the studies considerable attention has been given to the methodology used in the studies as well as the findings. This has been done in an effort to put the findings in

a context which will assist the reader in understanding the differences in findings which may appear to be based on examination of the same variables.

Background Studies

Although the studies in deceit by Hartshorne and May (1928) in the late 1920s did not involve college students and examined lying and stealing as well as cheating behaviors, their work provided a basis for study of both the personal characteristics of those who practice academic dishonesty and the situations in which dishonesty occurs. Their work focused particular attention on the school environment and its relationship to honesty in behaviors of children.

In introducing their work the investigators indicated that their studies were being undertaken at a time when, in spite of an obeisance to the ideal of honesty, fraud, or dishonesty existed in every walk of life, in schools, business, the professions, politics, religion, and private life. They sought to study behavior involved in deceit, and although they did not negate the importance of studying motives and ideals, they felt the first need was to establish the fact of deception and its amount and character. An initial assumption made by the investigators, which was borne out by their findings, was that the amount and character of the deception was a function of the situation.

Over 11,000 children, primarily in grades 5 to 8, were the subjects involved in the studies. As indicated, three types of

deceptive behaviors were studied: cheating, lying, and stealing. Cheating behavior was measured by a series of deception tests which contained 22 opportunities for cheating in classroom work, 4 opportunities in athletic contests, 2 in party games, and 1 in school work done at home. The measure of lying included some 36 questions; stealing tests offered 2 chances to steal money and 1 to steal small articles. The results of their tests were related to such factors as age, sex, intelligence, school grade, family background, and peer accusations of the subjects. Some of the factors which were found to be positively related to honesty were intelligence, higher income of families, emotional stability, school achievement, and good deportment marks. It was found that a student's cheating score on certain classroom tests was very much like that of his associates. The researchers concluded that deceit or honesty are not unified character traits but, rather, specific functions of situations. Cheating, lying, and stealing as measured by the tests utilized, were found to be only loosely related, and even within the measures of cheating it was found that a student might cheat on one type of test but not on another. From their work Hartshorne and May stated that: "Whether a child will practice deceit in any given situation depends in part on his intelligence, age, home background, and the like, in part on the nature of the situation itself and his particular relation to it" (p. 412). It is within this framework that much of the research on academic dishonesty has since been conducted.

One of the early studies which examined honesty among college students was done by James in 1933. Although the study did not examine behavior which today might be construed to be dishonest, an effort was made to separate claims regarding honesty from actual behavior. In his work James undertook the following four studies to analyze the status of honesty among young people, particularly college women.

(1) Honesty as shown by bluffing among college students was assessed by administering a multiple choice 20-item test to 102 college students, to which none of the choices were correct. The results indicated that pretending to know the right answer is generally practiced and that the tendency for bluffing increases as the student progresses in class. (2) Honesty as shown by cheating was measured by response to a confidential questionnaire given to teachers and children in elementary and high schools. Information was obtained from 439 children in 10 different schools. One hundred percent of the high school students and 98 percent of the teachers had been connected with cheating in some form. Expediency seemed to be the deciding factor in cheating. (3) Honesty as shown by lying among college girls was assessed by first developing a check list of lies told to each other, to parents, and teachers. Students were asked to indicate whether they lied regularly, occasionally, or never about the items on the check list. In order to check on whether the subjects would lie on the questionnaire itself, they were asked about their own practice and their opinion of the practice of others. James concluded that the subjects were frank in answering about their own

personal practice. The general conclusion was that lying was the prevalent pattern and, again, expediency seemed to be the most important variable whether in dealing with peers, parents, or teachers. (4) Honesty as shown by college women concerning their choice of a future husband's occupation was measured by asking college women to name the vocation in which they most preferred their future husbands to engage. Vocations were first rated by college and high school students, as well as teachers, as to honesty practiced within groups. The women ranked the profession of law next to last in terms of an "honest profession" but rated it first in terms of choice for husband. Honesty was generally overbalanced by other factors. The findings of the four studies point to the conclusion that honesty is not developed in our educational procedure in home or school and that people rely more on that which is expedient, not necessarily that which is honest.

James concluded that "the difference between practice, as shown by these figures, and the generally accepted standards of social conduct is so great and of such a vital nature that more evidence is needed to substantiate the findings" (p. 578). James, like Hartshorne and May, cautioned against thinking of honesty as a general trait and notes that individuals may be honest in one endeavor and dishonest in another. His work provided evidence that general honesty was not taught, and he suggested that it might be necessary to disregard a sentimental idea of honesty and substitute a more practical working concept.

Theory

Two widely held theories of honesty are the "General View" of honesty, which holds cheating to be an aspect of general morality related to background characteristics, and the "Specificity Hypothesis," which holds cheating to be a type of cultural transgression not related to background characteristics or other forms of transgressions. As reported, the early studies of Hartshorne and May and James cautioned against thinking of honesty as a general trait, giving attention to the influence of situations on behavior.

Burton (1963), in an analysis of the data collected by Hartshorne and May, reached a somewhat different conclusion than the researchers regarding the function of situation to moral behavior. The basis for the conclusions reached by Hartshorne and May was that the correlations between cheating tests were too low to produce evidence of a unified character trait of honesty. Burton, however, concluded that there were overlapping elements in the test situations and the data led him to favor a more general view of honesty. He did not, however, take the position that an individual's behavior will necessarily be consistent over many different kinds of situations, a position which is reflected in the work done by MacKinnon (1938). Although MacKinnon acknowledged that he did not test over different kinds of situations, he argued that the testing that was done provided sufficient support for his conclusion regarding the generality of character.

In his review and reconsideration of the generality of honesty, Burton had suggested that the greater the cognitive, especially verbal, association between two kinds of temptation situations, the greater will be the probability of the same response in both situations. Based on this suggestion, Steininger (1968) sought to test the hypothesis that a student's statement about the justification for cheating in a particular situation is a compromise between a negative attitude about cheating in general and the pressure of a particular situation. In a previous study, Steininger, with Johnson and Kirts (1964) developed a questionnaire to measure student attitudes about cheating. Because this measure of attitudes has been used in several subsequent studies it will be described in detail in the review of Steininger's study: "Attitudes Toward Cheating: General and Specific" (1968).

In Steininger's study 189 freshmen at Moravian College were administered two questionnaires at a convocation. The questionnaires were distributed on a random basis and respondents were assured anonymity. On both questionnaires attitudes toward cheating were measured by asking students to indicate on a 1 to 5 scale how great the justification for cheating would be on each of 32 situations which were based on all possible combinations of five dichotomous variables. The five dichotomous variables identified in Questionnaire I were "new and interesting" vs "meager and uninteresting" course content; "good" vs "poor" professor; "hard" vs "easy" tests; professor "leaves" vs "stays" in the room during tests; and

"meaningful" vs "senseless" tests. On Questionnaire II the dichotomous variables were "meaningful" vs "senseless" tests; "objective" vs "essay" tests; a "warm and friendly" vs a "cold and aloof" professor; a professor who discovers cheating "rarely" vs one who discovers it "frequently"; and a course average to date of "D or lower" vs "B or higher."

A common final section of both questionnaires asked about the students' reactions to the research, their estimates of the typical cheating behavior of college students generally and that of their closest friends. Background information such as age and sex was also solicited.

The findings for both sets of situational variables showed the predicted J-curve of conformity (Allport, 1934) for "good" situations, as well as the predicted deviation from this curve for "bad" situations, thus supporting the hypothesis stated. Unlike previous studies, no differences were noted in the responses between men and women.

Support for the "Specificity Hypothesis" regarding honesty, as opposed to the "General View," was reported by Garfield, Cohen, and Roth (1967) based on a study in which they sought to test the different predictions of the two positions. Thirty males and 50 females in an urban university were given a T-F test and told to correct their own papers, and after correcting them they were advised that 50 to 60 percent of all college students cheat when given an opportunity to do so. An anonymous questionnaire was then given

which asked them if they had cheated. It also solicited personal-social background information and asked them to rate their guilt about cheating with other types of transgressive behaviors.

Cheating was not found to be significantly correlated with any of the background variables; however, guilt about cheating did correlate significantly (.01) with sex and religion. There was found to be no significant correlation between cheating and other transgressive behaviors studied. Guilt about cheating correlated significantly with guilt about drinking but no other guilt items. While the results tend to support the specificity hypothesis of cheating, the types of transgressive behaviors which were compared with cheating may be questioned as "accepted" transgressive behaviors, thus raising a question about the significance of the results reported.

Measure of Attitudes and Their Impact

A study by Anderson (1957) was undertaken to assess general attitudes of university students toward cheating and, also, to delineate attitudes by sex and the college in which the students were enrolled. An opinionnaire was administered to 505 university students, 224 women and 281 men from five colleges at the University of Alabama. The students were asked to rate, 1 through 5, their personal attitude toward 28 different behavior situations. The situations were based on behaviors which others than those who participated in the study had observed and considered as cheating. The mean responses indicated that students clearly discriminated

among the situations. Certain situations, although labeled as cheating by scme, nevertheless were considered by most to be desirable ways of behaving. Other situations were considered highly objectionable by most students, with a middle rating group of situations on which there was considerable disagreement. University women expressed stricter feelings toward cheating than men, with graduate women in education expressing the strictest and sophomore women in arts and science and commerce relatively much more tolerant. Among men, the graduates and freshmen in education expressed the strictest attitudes, with the most tolerant attitudes found in commerce and engineering.

The Anderson attitude opinionnaire was used in two subsequent studies by Frymier and Uhlig and Howes.

Frymier (1960) sought to identify behaviors that would be considered cheating and to assess whether students and faculty see cheating the same way. The Anderson opinionnaire was aministered to a random sample of the faculty of the three large colleges within the university. Four instructors administered the same opinionnaire to 130 students in their classes. The opinionnaire called for a 1 to 5 rating of attitudes toward 28 behavioral situations. The difference in faculty and student total scores was significant at the .001 level. In 24 of the 28 behavioral situations faculty were more severe in labeling the behavior "not justified" although many differences were slight. Faculty, more than students, tended to employ the extremes of the scale, the difference beyond the .001 level of confidence. The data seemed to indicate that faculty and students see cheating

differently. While some differences were noted in specific behaviors, the differences seemed to be more generalized and more in degree than direction. As was expected, faculty were generally more severe in describing situations as cheating than were students. While there were significant statistical differences between the two groups in their orientation to cheating, the overall patterns were quite similar.

Frymier suggested the instrument used to assess attitudes may have lacked sophistication. This suggestion raises an important caution since, as Frymier stated, very few fine differentiations in perceptions occurred.

The study by Uhlig and Howes (1967) was undertaken to investigate attitudes toward cheating, to determine the extent to which students cheat during an examination given an opportunity, and to examine how attitudes relate to actual behavior. The study was conducted in three phases: (1) administration of Anderson's attitudinal scale which elicits responses to 28 contrived situations ranging from generally acceptable to wholly unacceptable; (2) opportunity to self-score examinations which had been previously graded (one group in a stress situation, the other not); and (3) comparing attitudes and actual cheating behavior. The investigators found that a large percentage of students will cheat if the situation is an advantageous one, but that the extent of external stress does not appear to make a significant difference. Attitudes as measured by the Anderson scale did not appear to predict actual behavior.

The Anderson scale, as an instrument to measure attitudes was questioned by Uhlig and Howes since different scales have yielded different results. The conclusions drawn from this study which relate to the relationship between attitudes and actions should perhaps be viewed with caution.

Sherrill, Salisbury, Horowitz, and Friedman (1971) also sought to determine the relationship between attitude and perceptions about cheating and actual observed cheating behavior. One hundred ninety-three students in one section of an introductory science course at a large university were the subjects. On three hourly exams during the semester the students were asked to grade their own papers after the exams had already been graded by the experimentors, although this was not known to the students. Following the third test students were classified as "cheaters" or "non-cheaters" based on score discrepancies. Thirty-four percent were identified as non-cheaters, 66 percent as cheaters.

To assess an attitude toward cheating, a 15-item attitude scale which was developed from a series of questions addressed to a comparable section was administered. The items were based on the following questions: (1) Is cheating a good, bad, or neutral act? (2) Should cheating be subjected to stern, mild, or no punishment? (3) Is cheating related to academic success? and (4) Is cheating justified under given conditions? Responses to each of the items were made on a six-point agree/disagree continuum. Students' perception of cheating was assessed by a questionnaire administered by

the instructor at the time of the final examination. Subjects were asked the percentage of students that had cheated on each exam and, for those that cheated, the amount.

In general, students' attitudes toward cheating were negative with those categorized as cheaters significantly less negative than non-cheaters. A T-test for significance was used in analyzing the data. Differentiation between cheaters who had cheated on three occasions, as opposed to those cheating only once, altered the findings. Although the means were linear in direction, no significant differences were found.

The percentage of cheating behavior estimated by cheaters was significantly greater than that estimated by non-cheaters. In all instances it was found that cheaters had higher estimates of the average number of points added to a grade; however, only in one instance were the estimates significantly different. The results supported the hypothesis that attitudes and perceptions were supportive of cheating behavior. The researchers concluded that their findings argued against charges of invalidity of indirect measures.

A study conducted by Freeman and Ataov (1960) examined the relationship between actual cheating behavior, three indirect attitude items related to cheating, and a direct question regarding whether or not the subjects had cheated. The subjects were 38 freshmen and sophopmores enrolled in an introductory sociology course at Syracuse University. Actual cheating behavior was measured by a method in which subjects could, supposedly without detection, change answers

to exam questions when correct answers were read after the tests were completed.

Four weeks following the exam the students were given an "Honor System Questionnaire" with three sets of questions. The first regarded factual data about the honor system. The second set required the students to decide whether students described in ambiguous hypothetical situations were or were not cheating. The third set described cheating in a series of contrived situations and required the students to decide whether or not cheating had occurred. Finally, the students were asked directly whether they had ever cheated on an exam.

Intercorrelations among variables were computed and revealed no significant correlations between any of the pairs of variables studied. Based on these findings, the investigators concluded neither the indirect items nor the direct question used in this study were of any utility whatsoever in predicting overt behavior.

Freeman and Ataov were quick to acknowledge that their results did not demonstrate any general lack of validity on the part of items of either type--direct or indirect. The results of the study do, however, caution against assumptions about the relationship of either direct or indirect indices to actual behavior. The lack of correlation between actual cheating and response to the direct question on whether they had ever cheated may be misleading, since students were not asked to self-report on the situation in which actual cheating was noted.

DeVries and Ajen (1971) undertook a study to examine students' attitudes and normative beliefs toward cheating, cheating intentions,

and their relationship to actual self-reported cheating behavior. Fishbein's (1967) theoretical model, which holds that a person's behavior intentions in any given situation are the joint function of his attitude towards performing the behavior and his beliefs about what others expect him to do in that situation, was utilized in the study.

Subjects were 36 men and 36 women from a midwest state university and 37 men and 37 women from a midwest Calvinist college. A four-part questionnaire was administered by the researchers in a regular class session. The first part of the questionnaire dealt with "cheating in college," the second with "copying answers from other college students' test papers," the third with "allowing others to copy from one's own test papers," and the fourth part requested the subjects to indicate sex, GPA, grade level, religiosity, and the type of college. The attitudinal and normative variables were defined operationally.

Correlations were computed for each of the biographical indices and both behavioral intentions and self-reported cheating behavior. All correlations proved insignificant. There were, however, highly significant correlations between the predictions in Fishbein's model and cheating intentions as well as self-reports of cheating behavior. Normative beliefs of the peer group and family were highly and significantly related to behavioral components. Normative beliefs of the church were found to be unrelated.

The experimentors acknowledged methodology problems in the way the subjects' motivation to comply with the social normative belief was measured. This component was later omitted from the analysis. The lack of relationship between biographical variables and cheating behavior is not consistent with findings in other studies. The investigators suggest that this may be because self-reported behavior rather than observed behavior was used as the index of cheating.

Knowlton and Hamerlynck (1967) sought to determine the "cheating situation" on two campuses and to test the "social-perceptual theory" in relationship to cheating behavior. The investigators assessed self-perception and perception of the environment for both cheaters and non-cheaters. Questionnaires were given to a 10 percent sample of undergraduates at a small four-year liberal arts college and to a 5 percent sample of undergraduates and graduates at large metropolitan universities in order to elicit judgments about the cheating behavior of themselves and others, their attitudes toward cheating and their opinions about "the cheating situation" at their school. Personal data were also collected.

Three specific hypotheses were tested: (1) Cheaters will perceive more cheating going on around them than will non-cheaters; (2) individuals who deviate from group norms will be less condemning of this behavior than those who do not deviate; and (3) individuals who deviate from socially prescribed norms will tend to attribute their own deviation to external forces while individuals who do not

deviate will tend to believe that those who do, do so because of internal forces (e.g., personality with character defect). Students who classified themselves as cheaters tended to give higher estimates as to the extent of cheating, tended to be less condemning of cheating, and explained cheating as due to environmental factors, whereas, the non-cheaters described the cheaters as having a basic personality defect. While the data reported generally tended to support the hypotheses, the explanation for the findings, by the investigators' acknowledgment, is not necessarily found within the clinical concept of projection utilized within the study. The findings do, however, provide support for the position that there is a positive correlation between attitudes toward cheating and actual behavior.

Individual Characteristics of Those Associated with Acts of Dishonesty

Based on the previous research, which has indicated that students who were less critical of cheating were more likely to cheat, Centra (1970) sought to indirectly study "cheaters" by studying attitudes toward cheating. Specifically, the study examined the characteristics of students with lenient attitudes toward cheating and attempted to determine whether different types of institutions enroll students who are more likely to cheat. The student sample included 1,500 entering freshmen from 37 institutions. One hundred nineteen four-year colleges and universities were used in compiling institutional measures. The 119 institutions represented 9 different

institutional types. The students were stratified by sex and type of institution attended.

The entering freshmen responded to the College Student Questionnaires, Part 1, which assesses background and attitudinal characteristics, including each student's reaction to cheating. Six responses from "do nothing" to "report the student" were included. Seven scales, Family Independence, Peer Independence, Liberalism, Social Conscience, Cultural Sophistication, Motivation for Grades, and Family Social Status were also included.

An analysis of variance was done on scale scores and different attitudes toward cheating. Students who said they were not disturbed by, and would do nothing about, another student cheating were found to have less academic motivation and fewer artistic-literary interests and found to be more accepting of unethical practices in the larger society. They were generally from the lower socioeconomic group with males and commuters slightly more prevalent.

It was found that small, all-women's or selective institutions, enrolled students with strong attitudes against cheating. These institutions also had lower reported cheating rates. Catholic men's colleges had the highest percentage of students with deviant responses.

This study suggests that the kind of student who enrolls in an institution is an important determinant of the peer climate. Centra stipulates, however, that further research is needed to investigate ways, other than through selective admissions, in which institutions can change undesirable peer climates.

Hetherington and Feldman (1964) undertook a study to determine what interaction exists, if any, between types of cheating behaviors and subject characteristics. Four types of cheating behavior were defined: individualistic-opportunistic, cheating which is unplanned and impulsive; individualistic-planned, cheating which involves an element of foresight and preliminary activity; social-active, cheating which involves two or more people and in which the subject actively instigates activity; and social-passive, cheating which involves two or more people but the subject plays a passive role. Information relating to the subjects themselves was obtained from a battery of personality tests: Concept Mastery Test (CMT), California Personality Inventory (CPI), Edwards Personal Preference Schedule (EPPS), and Minnesota Multiphasic Personality Inventory (MMPI), as well as a questionnaire eliciting demographic data. The subjects were 78 students, 39 male and 39 female, in two psychology classes at a large university.

All subjects were evaluated in three situations which they regarded as routine classroom procedures but which offered them an opportunity to cheat. In the first situation, an objective exam, five observers recorded instances of crib notes, copying, or permitting someone to copy. Subjects also were asked to grade their own papers unaware that they had been scored previously. In the second situation, an essay exam, students were given a list of five possible test questions and informed that the test would be two of those questions. Examination booklets passed out at the time of the

examination were inconspicuously marked so that if an already completed examination booklet were substituted it could be identified. In the third situation, an oral examination, the examiner was called out of the room and left easily accessible the text containing answers to the questions being asked. The position of the text was carefully marked so as to indicate whether it had been moved or opened.

Fifty-nine percent of the students exhibited some form of cheating. Situations 1 and 2 were about equal in their tendency to illicit cheating, in both situations about 50 percent. Only 22 percent of the students cheated in situation 3. Ten percent cheated in one situation, 64 percent in two, and 24 percent in all three.

Both the tendency to cheat and the specific type of cheating employed were significantly related to certain personal characteristics. Cheaters appeared to exhibit a set of behaviors similar to those produced by maternal over protection; they seemed to manifest a passive-dependent mode of adjustment; they appeared to seek out people, but lacked awareness of their general social immaturity and irresponsibility. There was a higher incidence of males and first born among cheaters than non-cheaters. There was more cheating by those of lower intelligence and lower grades. Self-reported church attendance was also found to be more prevalent in the cheating group.

An effort was made to group the actual types of cheating behavior into the types as originally defined. Those subjects engaging in any of the behaviors that defined a cluster were compared to all other cheaters and to all other subjects. Meaningful clusters of

personality emerged for each of the four types of cheaters. The most clearly delineated cheater was the individual who engaged in behaviors classified as social-passive. This individual is concerned with sustaining mutually supportive relationships with others and actions were oriented toward the maintenance of approval and affection. The individual appeared to be a calm, insightful, and socially mature person who permits others to copy as a nurturance for self.

In general, the findings suggest that different situations tend to elicit specific types of cheating behavior which are at least partially associated with subject characteristics. This finding was supported by a study done by White, Zielonka, and Greer (1967) in which independent-opportunistic cheating of 179 women students at a private women's college and state university was measured by 16 personality factors and 30 situations believed to reflect cheating. Separate and distinct patterns of personality behavior were revealed for cheaters and non-cheaters at each institution. Discriminations between academic behaviors in the 30 situations were reported on both campuses and differences between cheaters and non-cheaters emerged in evaluating student mores.

Jacobson, Berger, and Milliham (1970) investigated the relationships among social desirability (SD), need for social approval (NA), self-satisfaction (SES), sex differences and the tendency to cheat when confronted with failure. Subjects, 276 undergraduate volunteers in an introductory psychology class, were randomly assigned to two groups. The experimental group was placed in a situation where

individuals could have cheated and would not have thought the cheating would be detected. The control conditions were similar except for a "temptation period." Both groups were told what the average college student could do on the task. In reality the average was considerably less than they were told. SD, SES, and NA were measured by scores on the Marlowe-Crowne Scale.

The correlation of SES with NA was not significant; the correlation of SES and SD was low but significant--thus the SES was found to be relatively independent of the SD and NA measures. Based on multivariate analysis of variance, no general cheating effect resulted as a function of the temptation situation; however, women more than men were found to cheat in the temptation situations as were subjects of high self-satisfaction. The general cheating effect found in the temptation situation for subjects of high self-satisfaction and for women was found to be a function primarily of the tendency of women of high self-satisfaction to cheat. Subjects scoring high simultaneously on both the need for approval and self-satisfaction measures also demonstrated extensive cheating. Generally men were not found to cheat significantly--thus showing that the sex variable is important in interpreting the operation of personality factors.

In a study which addressed cheating among college graduate students, Zastrow (1970) examined the incidence of cheating and reasons for cheating as well as personality characteristics of cheaters and non-cheaters. Forty-five first-year graduate students in social work were unwittingly subjects. They were given an opportunity to self-score

three unannounced quizzes after scores had already been obtained using an invisible impression made on a second sheet, a method developed by Howells (1932). After being informed of this aspect of the study the subjects were given a questionnaire asking if they had ever cheated during the years they attended school; if they had, the reasons for cheating and information regarding what they believe constitutes cheating behavior. In an effort to discover if there were personality differences between cheaters and non-cheaters, the group form of the MMPI was administered.

At least 40 percent of the students cheated on one of the three quizzes. Pressure to get good grades was by far the most frequently given reason for cheating. There was a lack of consensus about what behavior constituted cheating. No significant differences were found between the cheaters and non-cheaters in personality characteristics as obtained from standard scales on the MMPI. The MMPI results supported "the doctrine of specificity of moral behavior" as opposed to the generality of moral behavior position which hypothesizes the existence of a general trait of honesty.

Because only one class in one institution was under investigation, it would be difficult to generalize to graduate students as a group because of variables that may be at play in other classes and at other institutions. The lack of a significant difference in personality traits between cheaters and non-cheaters is surprising in view of other research findings in studies of undergraduates; however, the reasons for cheating may be different for graduates and this may offset personality traits.

Situational Factors Related to Dishonesty

A comprehensive and detailed assessment of academic dishonesty on college campuses across the country was undertaken by Bowers in 1964. The three broad objectives of the study were to: (1) determine how much academic dishonesty goes on among college students, (2) identify the source and pressures contributing to academic dishonesty in college, and (3) evaluate the effectiveness of various arrangements for controlling this form of behavior.

The data were gathered in two stages. The first, a questionnaire to deans of students and student body presidents at all regionally accredited colleges and universities across the country, solicited information about the problem of academic dishonesty at their schools. The second stage was a questionnaire to students at 99 of the above schools. About 5,000 students (50 percent) returned the questionnaires.

In determining the sample, approximately equal numbers of students were selected from all participating institutions regardless of the size of the school. By weighting student responses according to the type of school an effort was made to compensate for discrepancy between the sample and the total population. The investigator pointed out that the schools included in the sample only represented those where the dean was sufficiently interested in the study to participate. No effort was made to follow-up with students who did not respond to the questionnaire and failure to respond, it was speculated, might have been due to a reluctance to admit cheating behavior. The data

presented regarding the level of academic dishonesty are, by the investigator's own acknowledgment, only a rough approximation of the amount of cheating that actually occurs on college campuses.

The findings of his work can be summarized as follows: The incidence of self-reported academic dishonesty is grossly underestimated by members of the campus community. Data showed that at least half of the students had engaged in academic dishonesty since coming to college. It was also shown that those who have difficulty adjusting to the student role, as evidenced by poor study habits and low grades, are more likely to cheat than the good students; however, when controlled for other factors associated with cheating, academic performance has only a minor effect.

Those who value the social aspects of college were found more likely to cheat than those who emphasized intellectual interests and activities. There is a strong association between those who cheat in high school and those who cheat in college. Students' college peers were found to have a powerful effect on their cheating behavior. The characteristic of the school itself was found to have a strong impact on the cheating behavior of students with "quality" schools associated with low levels of cheating. Large schools and coed schools were found to have the higher incidence of cheating. In schools which placed the primary responsibility for dealing with academic dishonesty in the hands of the students (e.g., honor system) the incidence of cheating was found to be much lower than with other systems.

That portion of the study which examines the setting in which academic dishonesty occurs reported that introductory courses, those taught by the lecture method and those relying on text books, had the higher occurrence of academic dishonesty. Large classes and classes with scheduled tests also were more frequently found to be within the group of classes where cheating was said to have occurred. Classes in which the instructor rated on the curve and gave unscheduled quizzes, as well as courses which carry larger credits, more often had acts of cheating occurring. Objective exams which were to be given, or had been on another occasion, were also factors related to classes where cheating occurred. Close proctoring was not seen to reduce cheating. The explanation was offered that strict rules more often would occur for large courses and courses using standardized examination procedures, thus, close proctoring and stricter procedures are probably responses to the tendencies to cheat already identified.

The incidence of cheating reported for the previous term decreased slightly from the freshman to senior year. The number of students totally that reported they cheated was startling in light of the almost unanimous disapproval of cheating. Parents' commitment to good grades was found to be a pressure to cheat, whereas the students' own expectation of themselves was not. Students in the most clearly career-oriented fields, such as business, engineering, and education, were found much more likely to cheat, with those in history, languages, and humanities in the least likely to cheat category.

In examining institutional arrangements for controlling academic dishonesty, most institutions (55 percent) were found to have "faculty-centered" control, both in terms of "detection" and "sanction"; however, 40 percent of the colleges had students take part in the sanctioning aspect of control either by serving on judicial bodies or through an honor system--which is defined as "student centered" control. Honor systems were found in about one-fourth of the colleges while the remaining colleges had judiciaries with student participation. The highest level of cheating was found on campuses with judiciary bodies and the lowest with honor systems. In looking at the effect of the control system, both relative and absolute, the honor system was seen to have its greatest impact in men's colleges.

The effect of honor systems and honor grading has been specifically examined in studies done by Ackerman, Canning, and Williams. Ackerman (1971) examined the effects of self-grading versus instructor-grading on test score outcomes.

Subjects of the study were 377 students in five lower division psychology sections of two separate courses. A total of 213 students were in the experimental sections, 164 students in the comparison sections. All groups received identical series of exams and basically the exam procedure was the same for both groups. Students in both groups were also asked to respond to an anonymous "cheating questionnaire." The responses of "attenders" versus "non-attenders" were analyzed separately.

Before each of the self-scoring tests, the experimental sections were given a brief but emotional "sermon" on the importance of not cheating. The classes in this study and the instructor were reported to be very popular with the students.

From the results of the Chi Square tests it was concluded that if there were an effect attributable to self-grading it did not result in any difference in test outcomes, at least for the experimental classes as a whole. Neither did the results show that students study less under a self-grading system, nor did it affect the number of times the student repeated the exam which was permitted under the examination procedures.

The results of the questionnaire on cheating revealed that 32 percent of the experimental group and 28 percent of the comparison group reported cheating at least one time per semester. The experimental classes estimated a greater frequency of cheating would result in self-grading. Of particular interest is that self-reported cheating in the self-graded classes versus the comparison group was greater; however, this was not found to be consistent with the actual test scores reported. No significant difference (.05) was noted between men and women or between upper classmen or lower classmen in relationship to self-reported cheating behavior.

The author cautions, and appropriately so, against generalization from this study because of the variables which combine and interact in a classroom situation.

The question of whether an honor system reduces classroom cheating was examined by Canning (1956) over a six-year period. The six years were divided into three time frames: (1) one year before the instigation of the honor code, (2) three years during the introduction and revision of the system, and (3) five years after the inauguration of the system. One instructor performed all experiments by giving students in his class the opportunity to self-score examinations when they had already been scored. Tabulated differences in the scores provided the data on who had cheated. Over the six-year period it was found that 45 percent of the students cheated. The "before" period had a high of 81 percent of students cheating. "During" the percentage was reduced to 41 percent, and the "now" period showed 30 percent. In five years the cheating incidence was reduced by nearly two-thirds. Similarly the average magnitude of the cheating was less.

Differences during these periods were examined in terms of sex, subjects' method of cheating, cheating related to use of pen or pencil, cheating as related to MMPI scores, and cheating related to academic proficiency. Before the honor system was inaugurated, male students cheated slightly out of proportion to their number which, after five years of the system, the situation was reversed.

While the favorite method of cheating was generally writing in correct answers where the questions had previously been blank, prior to the honor system changing answers was the favorite device. Cheaters more frequently used pencil and the decline in cheaters' preference for pencils is directly related to the reduction in

cheating throughout the experiment. No differences were noted between cheaters and non-cheaters on the MMPI. Cheaters consistently fell below non-cheaters in academic performance and "poorer" students raised themselves more points than did the "better" students.

In terms of students' verbalization about honesty and their actual behavior, it was found that 33 percent cheated after promising not to, 12 percent cheated as they said they would, 52 percent did not lie and did not cheat, and 3 percent promised to cheat and did not.

Canning cautions that the findings of this study must only be interpreted in view of many limitations. While this is true, it nevertheless represents an effort to make an assessment of the impact of an honor system under fairly controlled circumstances over a period of time.

In Williams' study (1969) 37 students in a general psychology class at Huntington College were given three examinations which were graded and then returned without marks. The students then graded their own papers, and the instructor's markings and the students' markings were compared to determine if students would cheat given the opportunity to do so. A general survey was given to the same students to determine their attitudes toward classroom cheating and the honor system.

The investigation concluded that the number of students who cheated was not significant, that cheating did not increase with the number of opportunities, that those cheating on the first examination did not necessarily do so on the second and third and that those who

cheated were not necessarily in the lower half of the grade scale as he had hypothesized. Results of the survey showed students to be "somewhat evenly divided" in their opinion that cheating to any degree would promote more cheating. Students felt proctoring would reduce cheating but that the honor system would promote higher standards of moral character.

While Williams concluded that the number of students cheating was not significant, he does not indicate on what basis he draws that conclusion. (Six of 37 students cheated on one or more of the three exams.) There may also be a question about whether the questions in the survey on attitudes were precise enough to give a very clear picture of attitudes toward cheating.

The extent to which cheating behavior is a result of classroom situations which arouse anxiety and hostility was the focus of a study done by Steininger, Johnson, and Kirts in 1964. The interest level of course content, meaningfulness of tests, test difficulty, quality of teaching, and instructor's staying or leaving during an examination were the variables used in describing classroom situations. The subjects, 49 students in an introductory psychology course, were asked to rate, on a 1 to 5 scale, 32 randomly presented descriptions of classroom situations in terms of justification for cheating, urge to cheat, actual behavior, guilt feelings, and letting others copy. The 32 descriptions were based on all possible combinations of the five variables, each with two levels (e.g., test hard, test easy).

In general, the data showed that the more negative the situation, the more the subjects considered cheating justified, the more they said they would have an urge to cheat and the more they said they would cheat. Analysis of variance showed the strongest negative stimulus was a test based on senseless detail followed by poor teaching and a test which was considered hard. When the 32 situations were grouped according to the situational variables which make for more, rather than less, hostility and anxiety, the combination of "course uninteresting," "professor poor," "test senseless," and "test hard" was found.

When asked about the norm on cheating among college students in general and among their closest friends, not one student said the norm is never to cheat, and they indicated that their closest friends cheat less than students in general. Directly expressed guilt feelings varied as a function of anxiety and hostility only when the situation involved the instructor leaving the room. The investigators concluded that students were basically aware they were doing something wrong when they cheated but, in view of the fact that they see cheating as justified under certain circumstances, it may not be surprising that guilt does not increase as copying and letting others copy increases. As the investigators suggest the guilt may have been influenced by an institutional factor, such as whether students had had experience with an honor system.

The findings reported in this study are consistent with the results of Steininger's study, which was reviewed previously, in which

she found the predicted J-curve of conformity for "good" situations and the predicted deviation from this curve for "bad" situations.

Johnson, with Kores, in 1968 undertook a study of attitudes toward cheating as a function of classroom dissatisfaction and peer norms. The intent of the study was to explore the interaction between student norms on cheating and the number of variables in the classroom situation expected to result in classroom dissatisfaction. Seventy-eight students in an introductory psychology class were randomly assigned to two treatment groups. One group was told that cheating was prevalent on campus, the other that it was rare. All subjects regardless of the norm groups were asked to rate 32 descriptions of classroom situations on the following five scales: (1) justification for cheating, (2) urge to cheat, (3) copying, (4) letting others copy, and (5) feelings of guilt. Again, 32 descriptions of classroom situations were based on all possible combinations of five situational variables, each with two diametrically opposed levels. The five situational variables were: (1) interest level of course, (2) quality of teaching, (3) test meaningfulness, (4) test difficulty, and (5) professor's presence.

A test for analysis of variance supported the hypothesis that cheating was significantly greater ($p = .0001$) in those classroom situations in which there were a greater number of negative situational variables and in that group which was told cheating was prevalent.

Because the treatment factor for student norms was so limited, the investigators' conclusion that, clearly, group norms have an effect

on reported attitudes and perceptions with respect to justification for cheating, urge to cheat, copying, and letting others copy may be questioned. The data generated from the study on the effect of classroom situations on attitudes and perceptions is consistent with previous findings.

The influence of peer norms on cheating behavior was also examined in a study conducted by Harp and Taietz (1966). The study focused on an analysis of the social situations that give rise to patterns of behavior representing a contravention of norms governing academic integrity. Cheating on term papers, self-reported, was the indicator of academic dishonesty used for the analysis. A stratified random sample of men enrolled in the three largest colleges of an Ivy League university were the subjects.

Following the freshman year a significant difference in the incidence of cheating on term papers was found for the three colleges. The vocationally oriented colleges had a higher incidence of cheating, and for all colleges the incidence of cheating was highest during the junior and senior years. When resident groups were compared (fraternities, university dormitories, off-campus) fraternity members reported a higher incidence of cheating, with those in vocationally oriented colleges significantly higher than those that did not have this emphasis. Fraternity membership was seen to have been an "opportunity" to cheat, both in a sense of providing the physical facilities necessary and the requisite normative support.

In examination of the question of why all fraternity members do not cheat, the investigators looked to see if there was evidence to indicate that structures of this kind facilitate the adaptive response of cheating for those who lack the ability to follow a more legitimate course. In comparing SAT scores and cumulative grade averages, the evidence suggested that the fraternity system may provide illegitimate adaptive solutions for students who score low on ability and performance.

The variable of "intellectual" self-concept was also studied in relationship to the incidence of cheating and it was found cheating reported for the "intellectuals" was significantly less than those not so defined. Controlling for intellectual orientation, fraternity members were, however, still found to cheat more than non-members.

In looking at students' educational goals as defined by plans to enter graduate study, it was found that students who aspire to attend graduate school cheat significantly less than those who do not. Data support the position that students who are planning to attend graduate school, but do not have an "intellectual" orientation are more inclined to cheat. The study concludes that regardless of an individual student's orientation and goals a higher incidence of cheating is reported by fraternity members than by independents.

While only a limited number of possible variables influencing a social structure were studied, the results of this study do offer further support for the influence of the social milieu, particularly fraternities, in terms of cheating behavior.

The college environmental conditions examined in 1961 by Roskens and Dizney (1966) in relationship to academic cheating were: (1) place of residence, (2) student-rated effectiveness of instruction, and (3) student-rated fairness of marking and evaluation. The data for this part of the study were obtained through questionnaires distributed to graduates at spring commencement. Questionnaires were returned by 487 graduates which was 61 percent of the total group. Six specific types of cheating were studied: cribbing, copying, illegally obtaining exams, plagiarism, ghost writing, and cooperative organized cheating.

Place of residence was not found to be significantly related to the extent of personal cheating reported; however, it was found that commuters were more concerned by cheating than other groups.

Five of the six types of cheating were positively related to fairness of marking and evaluation, whereas only two types of cheating were positively related to the effectiveness of instruction.

The types of cheating in which students reported they had engaged were significantly related to sex. Males reported greater than "expected" cribbing, but less than expected plagiarism. Conversely, females indicated less than expected cribbing, but more than expected plagiarism and ghost writing. The analysis of data also suggested that females express greater concern about cheating than do males.

In Roskens and Dizney's inquiry of 2,384 pre-college individuals, it was found that less concern about cheating was associated with lower status of father's occupation. Little relationship was

found between the size of high schools attended and self-reported cheating or cheating observed. A positive relationship was found in both sexes between expressed concern about cheating and the extent of self-cheating. Males were significantly different from females in both their concern for cheating and self-reported cheating. Males reported more cheating and less concern.

From their study of pre-college individuals, the researchers concluded that it was clear that those entering college brought with them different attitudes toward cheating. Their examination of data relating to pre-college individuals and college graduates revealed that there was a significant difference between pre-college and post-college groups in the extent to which individuals were concerned about cheating, with greater than "expected" concern exhibited by the post-college group.

This difference might be attributed to the fact that 97 percent of the pre-college population were included in the example, whereas only 61 percent of the post-college population responded. Those who responded might represent a group more concerned about cheating than the non-respondents.

Summary

In this chapter an effort has been made to report on studies conducted since 1960 which have examined academic dishonesty among students at colleges and universities. The review has been further limited to studies closely related to the questions under examination

in this study. Little attention has been given to theory specifically; however, a few studies were included to provide some theoretical framework for the consideration of the other studies reviewed.

In general, the review suggests to the writer that while attitudes impact behavior, situational variables may alter that impact. Thus students, although they disapprove of cheating, may cheat in certain situations. Classroom situations which are perceived by students to be negative, rather than positive, may influence the incidence of dishonesty as may the norms of the peer groups.

Studies which have examined demographic data in relationship to those identified as having engaged in dishonesty suggest that the incidence of dishonesty is greater among men than women, and that the grade point average and intellectual orientation is inversely related to the incidence of dishonesty. There is also evidence to suggest that dishonesty is more prevalent among students in vocationally oriented fields of study than in other fields. These findings have not, however, been consistently reported throughout the studies and, although attention was given in the review to the methodology of the studies as well as their findings, the writer acknowledges that it is often difficult to ascertain what the effect of methodology has been on discrepancies in findings which are reported.

In reviewing the literature it became quickly evident to the writer that academic dishonesty is a highly complex behavior about which we have limited knowledge, although it has been examined repeatedly from a number of perspectives. It appears that the

research efforts are fragmented and that practical application of findings is difficult. It is, in part, for this reason that this study was undertaken, not that it will necessarily contribute generally to the literature, but rather that it might provide information which could assist individuals within an institution to address a concern. In the future it may well be most productive for those concerned with dishonesty among college and university students to concentrate their research efforts on the testing and further refinement of instruments already developed and to attempt to generate a body of knowledge about dishonesty which will have greater general application.

CHAPTER III

DESIGN OF THE STUDY

Development of the Questionnaire

Two particular areas of interest are under investigation in this study. The first relates to how students and faculty perceive behaviors in relationship to what they personally believe is an appropriate standard for academic work. Part I of the questionnaire was designed to examine this area of interest. The second area under investigation is the incidence of dishonesty which occurs among students. When dishonesty is self-reported by students, information is also sought regarding the conditions which they believed existed at the time the behavior occurred. When dishonesty among students is reported by faculty, information is sought regarding actions taken in relationship to the students involved. Part II of the questionnaire relates to reporting of dishonesty, the conditions which students cite as being present when dishonesty occurs, and the actions which faculty take when it is discovered. Because the primary emphasis is on the examination of how dishonesty is defined and how prevalent behaviors are that are considered dishonest by current University standards, the examination of the conditions which students believed existed when dishonesty occurred and actions taken by faculty are of secondary interest. They are included primarily in an effort to gain some

information on which more extensive study can be undertaken in the future.

Part I of the questionnaire was patterned after an instrument developed by Anderson and subsequently used by Frymier and Uhlig and Howes in studies which sought to assess attitudes toward cheating. The Anderson opinionnaire included 28 different behaviors which were based on situations which others than those who participated in the study had observed and considered as cheating. Frymier suggested that the Anderson instrument may have lacked sophistication since he noted in his work that very few fine differentiations in perceptions occurred. The Anderson instrument as a measure of attitudes was further brought into question by Uhlig and Howes when they found that attitudes measured by the Anderson scale did not appear to reflect actual behavior, findings which are not supported by research which utilized other scales.

Thirty-three behaviors were selected for use in this study. They were selected primarily on the basis of situations which the researcher had encountered in ten years of work with the undergraduate judicial system at Michigan State University. In many instances they reflect situations about which there was either concern or confusion on the part of students and faculty. The situations cover a broader range of circumstances than those used in the Anderson instrument and an effort was made to develop items which might be more discriminating in perception. Attention was given to the inclusion of behaviors where the effect of the behavior directly benefited another, directly harmed

another, or directly resulted in self-benefit for the individual involved. Further, examples of behaviors defined by Hetherington and Feldman as independent-opportunistic, independent-planned, social-active, and social-passive were included. These types of behaviors are defined as follows:

> Independent-opportunistic behavior--behavior which is unplanned and impulsive.
>
> Independent-planned behavior--behavior which involves an element of foresight and preliminary activity.
>
> Social-active behavior--behavior which involves two or more people and in which the subject actively instigates activity.
>
> Social-passive behavior--behavior which involves two or more people in which the subject plays a passive role.

Forty-seven situations were drafted from which the 33 were selected. The selection was based on a review of the situations by the Judicial Programs Office staff at Michigan State University and after several revisions by the researcher. Face validity is claimed for the instrument based on the above reviews. A reliability analysis of the 33 items as one scale provided an alpha level of 9.2766 for undergraduates, 9.3914 for graduates, and 9.0345 for faculty. Based on these consistent and high correlations, reliability for the instrument is claimed.

The response options selected for each of the behaviors are as follows:

1. No violation,
2. Minor violation,
3. Somewhat serious violation,
4. Serious violation,
5. Very serious violation, and
6. Undecided.

These options were selected rather than those used in the Anderson instrument in an effort to get respondents to declare their perception of the behavior within the context of the situation in which it occurred. By using the "not justified" to "entirely justified" scale of the Anderson instrument it was not believed possible to ascertain whether the behavior was, or was not, perceived to be an appropriate standard for academic work.

In Part II of the questionnaire for students, ten behaviors were described which are prohibited under Michigan State University's regulations on scholarship and grades (MSU, 1977-79). These behaviors, for purposes of reporting in this study, are considered as acts of dishonesty.

Students were asked to report on whether they personally engaged in any of these ten behaviors, and if so, on how many occasions. The response options of 0 through more than 5, were arbitrarily selected because there was no basis on which to determine the most appropriate range. The academic year (Fall Term 1977, Winter term 1978, and Spring Term 1978) was the time period that was used for reporting purposes. The academic year was used in order to allow all students surveyed to have at least the experience of one year on which to base their responses. A longer period for reporting might have added to

problems of recall and would have necessitated the exclusion of freshmen from the sample.

Those students who reported that they had personally engaged in a behavior were asked whether they believed any of the following conditions existed at the time the behavior occurred:

1. The course was interesting,
2. There was little chance of my behavior being discovered,
3. The test/assignment was difficult,
4. My behavior was not different from that of other students,
5. Honesty was stressed by the instructor,
6. Competition among classmates was keen,
7. I was unprepared,
8. The test/assignment seemed meaningless,
9. The instructor was reasonable and fair, and/or
10. I thought I needed a better grade than I could earn.

Many of these conditions were variables which had been identified by Steininger (1968) in her study of situations in which students were asked to indicate the extent to which they felt there was a justification for cheating. For purposes of this study, however, the focus is on conditions which students believed actually existed when dishonesty occurred and not on their perception of hypothetical situations. In the previous instance they were to respond in relationship to whether they believed the behavior was justified.

In addition to the 10 conditions included in a key from which students could select responses, space was provided for their comment on other conditions or special circumstances which they believed applied in their situation. This response option was believed to be particularly important because the list of conditions was limited and it was thought to be essential not to restrict the students'

response to those conditions identified within the key. The comment section also was employed in order to explore conditions which may be present when dishonesty occurs that have not been examined in previous research, thus perhaps providing direction for further investigation.

In addition to the self-reporting on the 10 behaviors, students were asked to indicate the number of times they knew of other students engaging in each of the behaviors. The same response options used for self-reporting were selected since there was no basis on which to predict the amount of dishonesty which would be reported.

In Part II of the faculty questionnaire faculty were asked to report the number of times, if any, they had observed or discovered any of the 10 behaviors which were utilized in Part II of the student questionnaire. Response options of 0 through more than 3 were provided for each of the behaviors. Again, the response options were arbitrarily determined because of the lack of information regarding the incidence of dishonesty encountered. The reporting period was the current academic year. If faculty members reported that they had observed or discovered a behavior in their classes, they were asked to indicate the action which they took in relationship to the student involved. A key to actions provided the following options:

1. No action taken,
2. Warning only (verbal or written),
3. Required to repeat assignment,
4. Penalty grade or failing grade on assignment,
5. Penalty grade or failing grade for course,
6. Referred for University disciplinary action in lieu of or in addition to a failing grade, or
7. Other.

These options are known to the researcher to have been exercised by faculty and are within the guidelines established by the University for faculty to work with situations involving dishonesty (MSU, 1971-72, pp. 41-43; 1977-78, pp. 35-36).

If faculty members selected the option of "other," they were asked to indicate in a comment section what the "other" action included. Comments as to why certain actions were, or were not, taken was deemed important to understanding differences in actions which might be found. For each of the 10 behaviors, information regarding action taken in incidents 1 through 3 was solicited.

Faculty members were also asked to comment generally on their concerns relating to academic dishonesty and specifically on the questionnaire used in the study. The opportunity for open comment was belived to be particularly important because little was known by the researcher about the experience of faculty in working with dishonesty in academic work.

The Population and Sample

The student population for this study included all students, graduate and undergraduate, enrolled in the colleges of Business, Natural Science, and Social Science at Michigan State University during Spring Term 1978. In an effort to obtain a sample for study which might be reasonably representative of the total population of students and faculty, the programs of all colleges within the University were reviewed for diversity in programs offered. Enrollment

reports from the Office of the Registrar, Winter 1978, were reviewed in order to determine the number of students enrolled in each class within each of the colleges. The colleges of Natural Science and Social Science were selected for their diversity in programs offered. The College of Business was selected because of an interest in having a specific part of the student population from a college with an identifiable orientation toward a specific career.

The population from which the student sample was drawn is as follows:

College	Freshman	Sophomore	Junior	Senior	Graduate	Total
Business	1,117	1,175	1,396	1,493	727	5,908
Natural Science	888	737	937	999	862	4,423
Social Science	459	660	1,415	1,405	879	4,818

The faculty population included individuals who held tenure stream appointments in the College of Business, College of Natural Science, or College of Social Science at Michigan State University during Spring Term 1978. The listing of faculty members within this definition was provided by the Michigan State University Office of the Provost. The population from which the faculty sample was drawn is as follows:

College	Faculty
Business	110
Natural Science	310
Social Science	207
Total	627

In consultation with two individuals from Michigan State University's College of Education's Office of Research Consultation, a total student sample of approximately 1,500 students was set with approximately 500 from each college, with 100 from each of the classifications of freshman, sophomore, junior, senior, and graduate. The total student sample is approximately 10 percent of the population under study. A stratified random sample of students by college and classification was obtained through the Department of Evaluation and Research, Office of the Registrar, Michigan State University. The sample was drawn by a computer program written by staff of the Data Processing Department at Michigan State University. With the exception of those students who had no local address listed, those who listed their local address as a department office and those who listed a local address outside the continental United States, all other individuals whose names were supplied by the Office of the Registrar were included in the student sample. The final student sample size was 1,529.

The faculty sample was drawn from a list provided by the Office of the Provost of all tenure stream faculty in the three colleges. The names of faculty who held administrative positions or whose appointment was with a research unit in the college were removed from the list because, in the opinion of the researcher, they would probably have had little or no teaching responsibility during the past year. A number was assigned to all other faculty members and the sample was selected using the "Ten Thousand Randomly Assorted Digits" in Elementary Statistical Methods in Psychology and Education

(Blommers & Linquist, 1960). A sample size of 150 was set in consultation with a staff member in Michigan State University's College of Education, Office of Research Consultation, and 150 names were selected using the method described. The total faculty sample is approximately 24 percent of the faculty population under study.

Collection of the Data

The questionnaire, an accompanying letter, and a stamped, self-addressed return envelope were sent by U.S. Mail to students living off-campus and in University Apartments on May 17, 1978 (Appendices A and C). For students living on-campus in residence halls the distribution was made by personal delivery to the students' places of residence.

Distribution of the questionnaire, accompanying letter, and a stamped, self-addressed envelope to faculty was made by delivery to the department offices of the faculty involved (Appendices B and E). Both students and faculty were requested to return the questionnaires using the stamped, self-addressed envelope by May 24, 1978. Because all responses were to be made anonymously, a follow-up on non-responses was not possible; however, a reminder was sent on May 22 to all students and faculty who were asked to participate in the study requesting them to complete the questionnaire, if they had not done so, by June 5, 1978 (Appendices D and F). This date was the beginning of final examinations for Spring Term. In the reminder to students it was stated that if for some reason they did not choose to complete the

questionnaire to please fill out the background information requested and indicate why they were not responding. The method of distributing the follow-up letter to both students and faculty was the same as the initial distribution of the questionnaire.

The last questionnaires to be accepted for use in this study were received on June 10, 1978. The total number of responses from students was 747 of which 740 questionnaires were used in the analysis. Three questionnaires were not used because either too little information was supplied to be of value or there was no discrimination in responses. On one questionnaire the written comments of the respondent indicated a lack of understanding regarding the information being sought which the researcher concluded was based on language differences. One student responded by letter rather than by using the questionnaire and one student responded with information not relevant to the investigation. Additionally, a student returned the questionnaire not completed and stated that the researcher had not been clear about for whom the research was being done and for what purpose.

The total number of responses from faculty was 71 of which 66 questionnaires were used in the analysis. Three indicated they were not completing the questionnaire because they had not been teaching during the year. Of the three, two indicated they had been on leave and one stated that administrative responsibilities had precluded teaching. One stated that responsibilities did not allow time to complete the questionnaire, and additionally one stated that the survey would do more harm than good and returned the questionnaire unanswered.

Analysis of the Data

The data, once collected, was coded and keypunched on computer data cards for analysis on the Michigan State University "Scopehustler" system which utilizes the Control Data Corporation (CDC) 6500 Computer. The Statistical Package for the Social Sciences (SPSS) (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975) was used in the treatment of the data.

One-way analysis of variance tests were used to examine differences among groups in both perceptions and dishonesty reported. An alpha level of $a = .05$ was selected to determine significance in those hypotheses of primary interest.

Where significant differences were found among groups using the analysis of variance tests, a post hoc technique developed by Scheffé was employed to determine which of the specific group means contributed to differences among groups. This post hoc procedure was used primarily because of its exactness in working with unequal sample sizes. An alpha level of $a = .05$ was also set for the post hoc comparisons.

Where the data collected did not lend itself to statistical analysis, descriptive statistics only are reported. Not all questions which were originally posed resulted in the formulation of hypotheses.

The following hypotheses were developed for testing purposes. They are categorized by the particular area of interest under investigation. The hypotheses in the first two categories are of primary

interest, the latter two of secondary interest. The results from the testing of these hypotheses are reported in Chapter IV.

Hypotheses

Perceptions of Behaviors

H_1: There are no significant differences among undergraduate students, graduate students, and faculty in their perceptions of behaviors appropriate for academic work.

H_2: There are no significant differences among undergraduate students, when categorized by sex, class, college, or grade point average (GPA), in their perceptions of behaviors appropriate for academic work.

H_3: There are no significant differences among graduate students, when categorized by sex, college, or GPA, in their perceptions of behavior appropriate for academic work.

H_4: There are no significant differences among faculty, when categorized by years of teaching and college, in their perception of behaviors appropriate for academic work.

H_5: There is no significant difference between students who self-report dishonesty and those who do not, in their perception of behaviors appropriate for academic work.

Dishonesty Reported

H_6: There are no significant differences among undergraduate students, when categorized by sex, class, college, or GPA, in the incidence of dishonesty self-reported.

H_7: There are no significant differences among graduate students, when categorized by sex, college, or GPA, in the incidence of dishonesty self-reported.

H_8: There is no significant difference between students who self-report dishonesty and those who do not, in the incidence of dishonesty reported among other students.

Conditions Cited by Students when Dishonesty Occurred

H_9: There are no significant differences among undergraduates, when categorized by class, college, or GPA, in the conditions cited when dishonesty occurred.

H_{10}: There are no significant differences among graduates, when categorized by college or GPA, in the conditions cited when dishonesty occurred.

Actions Taken by Faculty when Dishonesty Was Discovered

H_{11}: There is no significant variance among faculty in the actions which they take when a dishonest behavior is observed or discovered.

Definition of Terms

The following operational definitions are used in the hypotheses and throughout the study:

Faculty--Refers to any person who held a tenure stream appointment in the College of Business, College of Natural Science, or College of Social Science at Michigan State University during Spring Term 1978.

Student--Refers to any person enrolled as a student in the College of Business, College of Natural Science, or College of Social Science at Michigan State University during Spring Term 1978.

Acts of dishonesty--Refers to those behaviors prohibited by Michigan State University's regulations on scholarship and grades.

Perception--Refers to what a person discerns or is cognizant of.

Nature of behavior--Refers to whether the behavior is independent-opportunistic, independent-planned, social-active, or social-passive in nature.

Independent-opportunistic behavior--Refers to that behavior which is unplanned and impulsive.

Independent-planned behavior--Refers to that behavior which involves an element of foresight and preliminary activity.

Social-active behavior--Refers to that behavior which involves two or more people and in which the subject actively instigates activity.

Social-passive behavior--Refers to that behavior which involves two or more people but the subject plays a passive role.

Summary

A two-part questionnaire was developed to examine how students and faculty perceive selected behaviors in relationship to what they believe is an appropriate standard of academic work and to attempt to determine what the incidence of dishonesty is among students. Additionally, an effort was made within the questionnaire to explore the conditions under which students believe dishonesty occurs and the actions taken by faculty when it is discovered.

The population for the study consisted of students and faculty in the colleges of Business, Natural Science, and Social Science at Michigan State University. Random sampling procedures were used in selecting a sample of 1,529 students and 150 faculty.

The questionnaires were distributed to individuals in the sample through U.S. Postal Service or personal delivery to residences or offices and returned through the U.S. Postal Service. Seven hundred and forty returned student questionnaires and 66 returned faculty questionnaires provided the data used in the analysis.

The data collected were coded and keypunched on computer cards and processed by a CDC 6500 Computer at Michigan State University using the SPSS program. A one-way analysis of variance technique was used to test the hypotheses stated and the Scheffé post hoc comparison procedure was employed to investigate differences where significance was found using the analysis of variance tests.

CHAPTER IV

ANALYSIS OF DATA

Introduction

This chapter is devoted to the analysis of data collected for examination of the specific questions outlined in Chapter I. Because the analysis goes beyond the testing of the hypotheses stated in Chapter III, the questions used to guide the researcher in the analysis are restated here.

1. Are there significant differences between students and faculty in their perceptions of behaviors which violate an appropriate standard for academic work?
2. Are there significant differences among students in their perceptions of behaviors which violate an appropriate standard for academic work when categorized by class standing, college, grade point average, or sex?
3. Are there significant differences among faculty in their perceptions of behaviors which violate an appropriate standard for academic work when categorized by college, sex, or years of college teaching experience?
4. What are the characteristics of the behaviors which are perceived by students and faculty to be serious violations of an appropriate standard for academic work?

5. Are there significant differences among students in the incidence of self-reported dishonesty when categorized by class standing, college, grade point average, sex, or place of residence?
6. Is there a significant relationship between a student's perception of what constitutes a violation of an appropriate standard for academic work and dishonesty self-reported?
7. Do the conditions which students believed existed when they engaged in acts of dishonesty differ by the specific type of behavior in which they engaged?
8. Is there a significant relationship between the self-reporting of dishonesty by students and their reporting of dishonesty by others?
9. Do faculty differ in the actions which they take when a specific type of dishonesty is observed or discovered?

A one-way analysis of variance technique was used to test the hypotheses. Where significant differences were found, a post hoc procedure developed by Scheffé was used to determine which specific group mean contributed to the overall difference among the groups under study. All hypotheses are stated in null form and a hypothesis is rejected when the computed probability values are greater than the established alpha level of .05.

Computations for the post hoc comparisons were done utilizing a procedure included in the Statistical Package for the Social Sciences (SPSS) (Nie et al., 1975, pp. 426-428) which provided ranges for the

.05 level of significance for the Scheffé technique. The critical difference between means was calculated using the values given with the one-way analysis of variance tests. In reporting the results of the post hoc tests, the means for the groups being compared are listed along with the difference in the means. Where the difference in group means is greater than the critical difference it is noted as being significant. In the tables the critical difference is included in parentheses following the difference in group means.

The results of the analysis of data are presented in both statistical and descriptive form and are reported under the following four categories which follow the four objectives of the study.

1. Perceptions of behaviors appropriate for academic work,
2. Dishonesty reported,
3. Conditions cited by students as being present when dishonesty occurred, and
4. Actions taken by faculty when dishonesty was discovered.

Perceptions of Behaviors Appropriate for Academic Work

Hypothesis 1 states: There are no significant differences among undergraduates, graduates, and faculty in their perceptions of behaviors appropriate for academic work.

The summary of the one-way analysis of variance test, appearing in Table 4.1, shows that the compute probability is greater than the .05 level of significance specified. The hypothesis is therefore rejected.

Table 4.1 One-way analysis of variance test for difference in means between groups in perceptions on all behaviors

Group	Undergraduate	Graduate	Faculty
Sample size	584	156	66
Mean	3.3528	3.4692	3.6897
Standard deviation	.5992	.6414	.5234

Analysis of Variance

	DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Between groups	2	7.5770	3.7885	10.4580	.0001*
Within groups	802	290.8940	.3623		

*Significant beyond the .05 level.

Since a significant difference was found by this test, the Scheffé post hoc comparison technique was used to determine which specific group mean contributed to the overall difference. The results of the post hoc tests are as presented in Table 4.2

Table 4.2 Post hoc comparisons for differences in perceptions among undergraduates, graduates, and faculty

Group	Mean	Graduates	Faculty
Undergraduates	3.3528	.1164 (.1348)	.3369 (.1299)[a]
Graduates	3.4692		.2205 (.1647)[a]
Faculty	3.6897		

[a]Mean difference beyond critical difference.

Significant differences were found between undergraduates and faculty and between graduates and faculty; however, no significant difference was found between undergraduate and graduate students in their perceptions as measured by the overall scale of 33 items.

In addition to examining the perceptions using the overall scale, it was believed important to examine perceptions by each individual item which described a specific behavior in order to determine on what behaviors there were significant differences. A one-way analysis of variance test was made on each behavior and a summary of the analysis of variance tests for those behaviors where significant differences were found is reported in Table 4.3. In consultation with a staff member in the Office of Research Consultation it was decided to establish a .005 level of significance in testing for differences on individual items. On those behaviors where significant differences were found between undergraduates, graduates, and faculty, Scheffé post hoc comparisons were made to determine where differences existed among groups. The results of the post hoc tests are reported in Table 4.4.

Based on the post hoc comparisons it was found that faculty viewed more seriously than undergraduates or graduates the following behaviors:

1. Let friend copy,
2. Submitted paper for two courses changing only the title page,
3. Did not accurately report lab experiment findings,
4. Critiqued take-home final for classmate when class was told to do own work,
5. Failed to use quotation marks with material copied verbatim,

Table 4.3 Summary of one-way analysis of variance tests for behaviors where significant differences were found in perceptions among undergraduates, graduates, and faculty

Behavior		DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Let friend copy	B	2	50.6842	25.3421	21.3455	.0001*
	W	796	945.0380	1.1872		
Referred to text during exam when left "on their honor"	B	2	16.3570	8.1785	7.8683	.0004*
	W	791	822.1871	1.0394		
Submitted paper for two courses changing only title page	B	2	105.3826	52.6913	38.6184	.0001*
	W	786	1072.4273	1.3644		
Reviewed frat file prior to exam	B	2	55.1951	27.5975	15.1771	.0001*
	W	782	1421.9591	1.8184		
Gave neighbor wrong answer when nudged for help	B	2	27.2649	13.6324	5.8463	.0030*
	W	722	1683.5627	2.3318		
Did not accurately report lab experiment findings	B	2	108.4852	54.2426	48.4453	.0001*
	W	774	866.6216	1.1197		
Received information about test from roommate in prior section	B	2	31.5551	15.7775	10.5006	.0001*
	W	788	1183.9999	1.5025		
Looked at another's exam for formula during test	B	2	36.0254	18.0127	15.2996	.0001*
	W	794	934.8052	1.7773		
Failed to list prior work on application for admission	B	2	22.7741	11.3871	6.9792	.0010*
	W	762	1243.2599	1.6316		
Had beer with instructor in hopes of getting better grade	B	2	15.6596	7.8298	5.7648	.0033*
	W	781	1060.7575	1.3582		
Critiqued take-home final for classmate when class was told to do own work	B	2	82.9244	41.4622	30.7205	.0001*
	W	786	1060.8323	1.3497		
Failed to use quotation marks with material copied verbatim	B	2	18.5253	9.2627	7.5916	.0005*
	W	780	951.6918	1.2201		
Signaled answers during exam	B	2	39.4995	19.7497	17.7129	.0001*
	W	795	886.4203	1.1150		
Purposefully failed to do part on joint project but still received an A grade	B	2	25.0539	12.5269	10.0386	.0001*
	W	781	974.5877	1.2479		
Faked footnotes	B	2	21.2322	10.6161	11.9065	.0001*
	W	781	696.7053	0.8921		
Prepared bluebook prior to exam and substituted it for one to be done in class	B	2	24.5967	12.2983	12.2792	.0001*
	W	782	784.2226	1.0016		

Note: B represents between groups; W, within groups.

*Significant beyond the .005 level.

Table 4.4 Post hoc comparisons for differences in perceptions among undergraduates, graduates, and faculty on those behaviors where significant differences were found

Behavior	Group	Mean	Graduates	Faculty
Let friend copy	Undergraduates	3.5216	.3494 (.2418)[a]	.8476 (.3497)[a]
	Graduates	3.8710		.4982 (.3951)[a]
	Faculty	4.3692		
Referred to text during exam when left "on their honor"	Undergraduates	3.9617	.2263 (.2312)	.4625 (.3274)[a]
	Graduates	4.1818		.2424 (.3726)
	Faculty	4.4242		
Submitted paper for two courses changing only title page	Undergraduates	2.1254	.3580 (.2594)[a]	1.3121 (.3860)[a]
	Graduates	2.4834		.9541 (.4332)[a]
	Faculty	3.4375		
Reviewed frat file prior to exam	Undergraduates	2.5219	.2752 (.3036)	.9438 (.4457)[a]
	Graduates	2.2467		.6686 (.5024)[a]
	Faculty	1.5781		
Gave neighbor wrong answer when nudged for help	Undergraduates	2.5547	.4173 (.3435)[a]	.4617 (.4924)
	Graduates	2.9720		.0444 (.5566)
	Faculty	3.0164		
Did not accurately report lab experiment findings	Undergraduates	2.3922	.5319 (.2604)[a]	1.2290 (.3640)[a]
	Graduates	2.9241		.6971 (.4155)[a]
	Faculty	3.6212		
Received information about test from roommate in prior section	Undergraduates	2.5557	.5097 (.2657)[a]	.1631 (.3850)
	Graduates	3.0654		.3466 (.4349)
	Faculty	2.7188		
Looked at another's exam for formula during test	Undergraduates	3.5687	.3223 (.2333)[a]	.6889 (.1475)[a]
	Graduates	3.8910		.3666 (.3797)
	Faculty	4.2576		
Failed to list prior work on application for admission	Undergraduates	2.8221	.1579 (.2886)	.6154 (.4139)[a]
	Graduates	2.9800		.4575 (.4679)
	Faculty	3.4375		
Had beer with instructor in hopes of getting better grade	Undergraduates	2.0230	.2191 (.2606)	.4538 (.3745)[a]
	Graduates	1.8039		.2347 (.4233)
	Faculty	1.5692		
Critiqued take-home final for classmate when class was told to do own work	Undergraduates	2.2680	.3725 (.2595)[a]	1.1320 (.3732)[a]
	Graduates	2.6405		.7595 (.4220)[a]
	Faculty	3.4000		
Failed to use quotation marks with material copied verbatim	Undergraduates	2.1479	.1369 (.2482)	.5552 (.3574)[a]
	Graduates	2.2848		.4183 (.4043)[a]
	Faculty	2.7031		
Signaled answers during exam	Undergraduates	3.8700	.2977 (.2344)[a]	.7512 (.3367)[a]
	Graduates	4.1677		.4535 (.3808)[a]
	Faculty	4.6212		
Purposefully failed to do part on joint project but still received A grade	Undergraduates	3.9296	.3704 (.2503)[a]	.4608 (.3614)[a]
	Graduates	3.5592		.0904 (.4084)
	Faculty	3.4688		
Faked footnotes	Undergraduates	2.1270	.1511 (.2122)	.5851 (.3014)[a]
	Graduates	2.2781		.4340 (.3420)[a]
	Faculty	2.7121		
Prepared bluebook prior to exam and substituted it for one to be done in class	Undergraduates	4.1664	.3104 (.2247)[a]	.5367 (.3237)[a]
	Graduates	4.4768		.2263 (.3663)
	Faculty	4.7031		

[a]Mean difference beyond critical difference.

6. Signaled answers during exam, and
7. Faked footnotes.

Faculty viewed more seriously than undergraduates the following behaviors:

1. Referred to text during exam when left "on honor,"
2. Failed to list prior work on application for admission, and
3. Prepared bluebook prior to exam and substituted it for one to be done in class.

There were no behaviors where there were significant differences between faculty and graduate students where there were not also significant differences between faculty and undergraduates.

Those behaviors viewed more seriously by graduates than undergraduates are as follows:

1. Let friend copy,
2. Submitted paper for two courses, changing only title page,
3. Gave neighbor wrong answer when nudged for help,
4. Did not accurately report lab experiment findings,
5. Looked at another's exam for formula during test,
6. Received information about test from roommate in prior section,
7. Signaled answers during exam,
8. Prepared bluebook prior to exam and substituted it for one to be done in class, and
9. Critiqued take-home final for classmate when class was told to do own work.

Undergraduates viewed the following behaviors more seriously than faculty:

1. Reviewed frat file prior to exam,
2. Had beer with instructor in hopes of getting better grade, and
3. Purposefully failed to do part on joint project but still received A grade.

"Reviewing frat file prior to exam" was seen by both undergraduates and graduates as being more serious than by faculty.

On five of the ten behaviors where there were significant differences found between undergraduates and faculty, significant differences were also found between undergraduates and graduates. Although there were nine behaviors on which significant differences between undergraduates and graduates were found, the reader is reminded that in using the single scale to measure perceptions, no overall significant difference was found between the two groups.

In addition to examining the differences among groups, the rank order of behaviors is reported so that the overall seriousness with which the behaviors were perceived can be examined.

The ranking of behaviors in terms of the seriousness with which they are viewed by undergraduates, graduates, and faculty is shown in Table 4.5. The listing of behaviors reflects the ranking of the behaviors by undergraduates with the rank of the behavior by graduates and faculty noted in the two following columns:

Table 4.5 Rank order of perceptions by undergraduates, graduates, and faculty

Behavior	Rank		
	Undergraduates	Graduates	Faculty
Persuaded secretary to change two grades	1	1	1
Submitted classmate's paper by changing title page	2	2	2
Took all reserve books from library for "house" library	3	4	7
Took exam for frat brother on advice of frat officer	4	5	4
Twin sister took entire course	5	3	3
Exchanged football tickets for a B grade	6	7	5
Prepared bluebook prior to exam; substituted it for one to be done in class	7	6	6
Found instructor's briefcase and copied mid-term exam	8	8	12
Referred to text in exam when left on "honor"	9	9	9
Intentionally gave classmate wrong formula	10	10	8
Purposefully failed to do share on joint project; still received an A	11	18	19
Changed three answers when self-scoring exam	12	11	13
Falsely advised instructor that exam was "out" before given.	13	13	14
Signaled answers during exam	14	10	8
Used calculator during exam when instructed not to	15	17	17
Looked at another's exam for formula	16	14	11
Took test booklet after exam without authorization	17	16	15
Let friend copy during exam	18	15	10
Had doctor write excuse to cover missing exam; was unprepared	19	20	35
Paid classmates for term papers to put in commercial company file	20	24	24
Failed to list prior work on application for admission	21	21	21
Gave friend commercial term paper to submit	22	25	27
Used unauthorized PNC	23	27	26
Received information on exam from roommate in prior section	24	19	29
Gave neighbor wrong answers when nudged for help	25	22	25
Reviewed frat file prior to exam	26	30	32
Did not accurately report results of lab experiment	27	23	18
Critiqued classmates take-home final when class told to do own work	28	26	22
Failed to use quotation marks on material used verbatim	29	30	31
Faked footnotes when couldn't find notes	30	31	30
Submitted same paper for two courses; changed only title page	31	29	20
Had beer with instructor in hopes of getting better grade	32	32	33
Received tutoring in exchange for babysitting	33	33	31

On examination of the ranking order of the seriousness of behaviors by undergraduates, graduates, and faculty it is noted that on only eight behaviors is there a difference greater than four in the position of rank. This observation would suggest that the differences among the three groups are greater in degree than in direction.

It is also interesting to note that the seven behaviors which undergraduates ranked as being the most serious, were also ranked as the seven most serious by graduates and faculty, although not in the same rank order.

It would generally appear that the greatest discrepancy in rank is found in the behaviors which fall to the middle of the ranking scale, with less discrepancy at either the high or low extreme.

The five behaviors ranked most serious by undergraduates and those five ranked least serious were examined in an effort to determine the nature of the behaviors at the extremes of the continuum.

First, the writer categorized all behaviors as to whether they were independent-opportunistic (I-O), independent-planned (I-P), social-active (S-A), or social-passive (S-P). Further, the behaviors were categorized in terms of whether the effect of the behavior resulted in direct self-benefit (S-B), direct benefit to another (B-A), or direct harm to another (H-A). After the writer had categorized the behaviors, four personnel staff members made their own independent judgments regarding the nature of the behaviors. The categorization of the behaviors reflected in Table 4.6 represents the category designation of four out of the five individuals who reviewed the behaviors.

Table 4.6 Nature of behaviors perceived most serious and least serious

Behavior	S-B	B-A	H-A	I-O	I-P	S-A	S-P
Most Serious Behaviors:							
Persuaded secretary to change two grades	x		x			x	
Submitted classmate's paper by changing title page	x		x		x		
Took all reserve books from library			x		x		
Took exam for frat brother on advice of frat officer		x				x	
Twin sister took entire course	x					x	
Least Serious Behaviors:							
Failed to use quotation marks on material copied verbatim	x				x		
Faked footnotes when couldn't find note cards	x				x		
Submitted same paper for two courses	x				x		
Had beer with instructor in hopes of getting better grade	x				x		
Received tutoring in exchange for babysitting	x				x		

The three behaviors viewed most seriously by undergraduates and ranked high by graduates and faculty were behaviors where both direct harm to another and direct self-benefit resulted. Only two other behaviors within the 33 items were categorized as directly harming another. They were "intentionally giving a classmate a wrong formula" and "intentionally giving a classmate a wrong answer when nudged during an exam." The harm resulting from having a grade changed, having someone substitute papers to be submitted, and taking all reserve books is probably seen as being greater in degree than the harm of the two behaviors excluded from those ranked most serious.

Those behaviors ranked least serious, it would appear, were independent acts where there is no evidence to indicate that any direct harm resulted. Although self-benefit is intended it was not necessarily derived. From an inspection of the categorization of all 33 behaviors and their ranking, it would appear that whether the behavior is independent-opportunistic, independent-planned, social-active, or social-passive does not, in and of itself, influence the seriousness with which it was perceived; rather, who, if anyone, is directly affected by the behavior, and the degree of benefit or harm may be more related to the seriousness with which it is perceived.

Other than visual inspection of the data, an analysis of the nature of behaviors and their perceived seriousness was not undertaken. An initial effort was directed toward the development of sub-scales which might be used in further treatment of the data; however, scale building to allow for statistical analysis of the data was not seen

as central to this investigation and, therefore, not pursued. It might be useful, however, to do so in a subsequent study.

Hypothesis 2 states: There are no significant differences among undergraduate students when categorized by sex, class, college, or GPA, in their perceptions of behaviors appropriate for academic work.

A one-way analysis of variance test for difference among groups within each category was used to determine if there were significant differences. Table 4.7 reports the results of these tests.

Since a significant difference was found using the one-way analysis of variance on all variables--sex, class, college, and grade point average--hypothesis 2 is rejected.

A one-way analysis of variance test was also used to determine whether there was a significant difference between undergraduates enrolled in preprofessional programs and those who were not. Table 4.8 reports the results of this analysis.

The result of this test shows no significant difference in perceptions between preprofessional students and those not in preprofessional programs.

Undergraduate women were found to rate the behaviors more seriously than men. The post hoc comparisons using the Scheffé technique failed to reveal where there were significant differences between freshmen, sophomores, juniors, and seniors although the alpha level (.0493) denotes significant differences by class.

Table 4.7 One-way analysis of variance tests for significant differences among undergraduates when categorized by sex, class, college, and GPA

Group	Sex	
	Female	Male
Sample size	303	248
Mean	3.4215	3.2550
Standard deviation	.5672	.6256

Analysis of Variance

	DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Between groups	1	3.7779	3.7779	10.7009	.0011*
Within groups	549	193.8230	0.3530		

Group	Class			
	Freshmen	Sophomores	Juniors	Seniors
Mean	3.2965	3.2862	3.3546	3.4627
Standard deviation	.6027	.5719	.6495	.5296

Analysis of Variance

	DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Between groups	3	2.7678	0.9226	2.6337	.0491*
Within groups	575	201.4246	0.3503		

Group	College		
	Business	Natural Science	Social Science
Mean	3.2360	3.4338	3.3763
Standard deviation	.6169	.5321	.6205

Analysis of Variance

	DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Between groups	2	4.0388	2.0194	5.7931	.0032*
Within groups	567	197.6504	.3486		

Group	Grade Point Average								
	1.76-2.00	2.01-2.25	2.26-2.50	2.51-2.75	2.76-3.00	3.01-3.25	3.26-3.50	3.51-3.75	3.76-4.00
Sample size	25	26	68	86	97	105	87	58	23
Mean	3.3369	3.0299	3.2568	3.3408	3.3185	3.4216	3.4129	3.5041	3.2612
Standard deviation	.6543	.5971	.6104	.6127	.5734	.5763	.5756	.4637	.7444

Analysis of Variance

	DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Between groups	8	5.8021	.7253	2.1029	.0338*
Within groups	566	195.2041	.3449		

*Significant beyond the .05 level.

Table 4.8 One-way analysis of variance test for difference in perceptions of preprofessional and nonpreprofessional students

Group	Preprofessional	Nonpreprofessional
Sample size	216	351
Mean	3.3727	3.3547
Standard deviation	.5923	.5818

Analysis of Variance

	DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Between groups	1	.0436	.0434	.1270	.7217
Within groups	565	193.9086	.3432		

Students in Natural Science were found to rate behaviors significantly more seriously than students in the College of Business. Although students in Natural Science also rated behaviors more seriously than students in the College of Social Science, the post hoc comparisons between students in these two colleges did not show significance.

In an effort to determine where the significant differences existed among students by GPA, post hoc comparisons between those GPA groups with the lowest and highest mean scores on perceptions were compared. This test did not identify where the differences existed; however, when the two groups with the lowest mean scores were compared with the two groups with highest mean scores, significant differences were found. Thus, those students whose GPA fell

within the range of 3.26 to 3.75 were found to perceive behaviors more seriously than students whose GPA fell within the range of 2.01 to 2.50. It was interesting to note, however, that those students whose GPA's were at the extreme upper and lower limits (1.76 to 2.00 and 3.76 to 4.00) did not vary to any great degree (mean scores--3.336 and 3.2612). Table 4.9 reports the results of post hoc comparisons which were made that provide support for these findings.

In addition to examining differences by sex, class, college, and GPA in perceptions of behaviors appropriate for academic work as measured by the overall scale, the data were further examined to determine on what specific behaviors there were significant differences. A one-way analysis of variance test was performed on each of the 33 items in the perception scale. Table 4.10 summarizes the tests on behaviors where significant differences were found. The significant level was set at .005 for these tests because the same subjects were responding to all 33 items.

Scheffé post hoc tests were performed to determine where there were significant differences among groups in each category. Table 4.11 reports the results of these tests.

Women viewed seven behaviors to be significantly more serious than men. Examination of the post hoc tests reveals that on three behaviors there were significant differences at the .005 level by class. Seniors rated two behaviors significantly higher than freshmen, sophomores, or juniors. On the third behavior, seniors rated the behavior more seriously than freshmen and sophomores but not juniors.

Table 4.9 Post hoc comparisons for differences in perceptions among undergraduates when categorized by class, college, and GPA

Group	Mean	Class		
		Sophomores	Juniors	Seniors
Freshmen	3.2965	.0103 (.1975)	.0581 (.1906)	.1662 (.1949)
Sophomores	3.2862		.0684 (.1963)	.1765 (.2004)
Juniors	3.3546			.1081 (.1937)
Seniors	3.4627			

Group	Mean	College	
		Natural Science	Social Science
Business	3.2360	.1978 (.1466)[a]	.1403 (.1502)
Natural Science	3.4338		.0575 (.1500)
Social Science	3.3763		

Group	Mean	Grade Point Average
Grade point average 2.01-2.50	3.0871	3.63 (3.007)[a]
Grade point average 3.26-3.75	3.4510	

[a]Mean difference beyond critical difference.

Table 4.10 Summary of one-way analysis of variance tests on behaviors where a significant difference was found among undergraduates when categorized by sex, class, college, and GPA

Behavior		DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Sex						
Reviewed frat file prior to exam	B	1	18.6540	18.6540	9.8622	.0018*
	W	536	1013.8293	1.8915		
Purposefully failed to do part on joint project but still received an A	B	1	14.0142	14.0142	11.8873	.0006*
	W	533	628.3671	1.1789		
Paid classmates for papers to put in commercial term paper files	B	1	31.8650	31.8650	14.2156	.0002*
	W	515	1154.4019	2.2416		
Submitted classmate's paper as own by changing title page	B	1	6.0486	6.0486	15.5444	.0001*
	W	540	210.1236	0.3891		
Referred to text in exam when left on "honor"	B	1	17.5264	17.5264	16.4693	.0001*
	W	540	574.6600	1.0642		
Gave friend a commercial term paper to submit	B	1	45.1242	45.1242	28.9929	.0001*
	W	525	817.1035	1.5564		
Had beer with instructor in hopes of a better grade	B	1	26.5934	26.5934	19.3085	.0001*
	W	531	731.3391	1.3773		
Class Standing						
Let friend copy	B	3	21.8749	7.2916	6.1710	.0004*
	W	570	673.5136	1.8160		
Received information about test from roommate in prior session	B	3	18.7525	6.2508	4.5743	.0036*
	W	565	772.0700	1.3665		
Referred to text during exam when left on "honor"	B	3	16.0950	5.3650	5.0678	.0018*
	W	565	598.1300	1.0586		
College						
Gave wrong formula to classmate	B	2	16.8695	8.4348	6.5610	.0015*
	W	542	696.7928	1.2856		
Changed answers when self-scoring exam	B	2	13.3278	6.6639	6.5718	.0015*
	W	558	565.8201	1.0140		
Had beer with instructor in hopes of better grade	B	2	17.4910	8.7455	6.1333	.0023*
	W	550	784.2486	1.4259		
Grade Point Average						
Received information on exam from roommate in prior section	B	8	31.2023	3.9003	2.8738	.0038*
	W	556	754.6101	1.3572		
Signaled answer during exam	B	8	31.0199	3.8775	3.4856	.0006*
	W	556	621.8534	1.1124		

Note: B represents between groups; W, within groups.

*Significant beyond the .005 level.

Table 4.11 Post hoc comparisons for behaviors where significant differences in perceptions were found among undergraduates by class, college, and GPA

Behavior	Group	Mean	Class		
			Sophomores	Juniors	Seniors
Let friend copy	Freshmen	3.3649	.0035 (.3646)	.1156 (.3646)	.4840 (.3604)[a]
	Sophomores	3.3684		.1121 (.3612)	.4805 (.3701)[a]
	Juniors	3.4805			.3684 (.3570)[a]
	Seniors	3.8489			
Received information about test from roommate in prior section	Freshmen	2.4041	.0621 (.3934)	.0692 (.3815)	.4602 (.3876)[a]
	Sophomores	2.4662		.0071 (.3908)	.3981 (.3973)[a]
	Juniors	2.4733			.3910 (.3856)[a]
	Seniors	2.8643			
Referred to text when left "on honor"	Freshmen	3.8288	.0030 (.3469)	.1248 (.3441)	.9549 (.3416)[a]
	Sophomores	3.8258		.1278 (.3441)	.4171 (.3504)[a]
	Juniors	3.9536			.2898 (.3389)
	Seniors	4.2429			

Behavior	Group	Mean	College	
			Natural Science	Social Science
Gave wrong formula to classmate when nudged for help	Business	3.7112	.3260 (.2873)[a]	.4064 (.2948)[a]
	Natural Science	4.0372		.0804 (.2951)
	Social Science	4.1176		
Changed answers when self-scoring exam	Business	3.6859	.3659 (.2522)[a]	.2463 (.2578)
	Natural Science	4.0518		.1196 (.2134)
	Social Science	3.9322		
Had beer with instructor in hopes of better grade	Business	1.7937	.4262 (.3006)[a]	.2583 (.3083)
	Natural Science	2.2199		.1679 (.3075)
	Social Science	2.0520		

Behavior	GPA Group	Mean	Grade Point Average
			3.76-4.00
Received information about test from roommate in prior section	2.01-2.25	1.1667	1.203 (1.216)
	3.76-4.00	2.8697	

Behavior	GPA Group	Mean	Grade Point Average	
			3.01-3.25	3.26-3.50
Signaled answers during exam	2.01-2.25	3.0800	.9873 (.9286)[a]	1.0595 (.9473)[a]
	3.01-3.25	4.0673		
	3.26-3.50	4.1395		

[a]Mean difference beyond critical difference.

On the three behaviors where a significant difference was found by college, the students in Natural Science were found to view the behaviors more seriously than those in the College of Business. No significant differences were found between Natural Science and Social Science students or between Business and Social Science students on these behaviors.

In looking for where differences existed in student groups by GPA, the Scheffé post hoc technique failed to identify significant differences between groups on the behavior "received information on exam from roommate in prior section," although the comparison between students with GPA's of 2.01-2.25 and those with GPA's of 3.76-4.00 was near the significance level. On the behavior "signaled answers during exam" a significant difference was found between those with GPA's between 2.01 and 2.25 and those with GPA's between 3.01 and 3.50. An inspection of the data again revealed that, although there is a tendency for those with the higher GPA's to view a behavior more seriously than those with lower GPA's, those students at the extremes of the GPA range did not necessarily hold the most divergent positions regarding the seriousness of the behavior.

Hypothesis 3 states: There are no significant differences among graduate students when categorized by sex, college, or GPA in their perceptions of behaviors appropriate for academic work. The results of a one-way analysis of variance test for differences among groups within each category are presented in Table 4.12.

Table 4.12 One-way analysis of variance tests for significant differences in perceptions among graduate students when categorized by sex, college, and GPA

Group	Sex	
	Female	Male
Sample size	52	102
Mean	3.6864	3.3609
Standard deviation	.6272	.6289

Analysis of Variance

	DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Between groups	1	3.6491	3.6491	9.2435	.0028*
Within groups	152	60.0065	0.3948		

Group	College		
	Business	Natual Science	Social Science
Sample size	44	54	57
Mean	3.5051	3.4231	3.4827
Standard deviation	.6111	.7185	.5998

Analysis of Variance

	DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Between groups	2	0.1817	.0908	.2172	.8050
Within groups	152	63.5603	.4182		

Group	Grade Point Average			
	3.01-3.25	3.26-3.50	3.51-3.75	3.76-4.00
Sample size	13	38	48	52
Mean	3.5306	3.3099	3.4310	3.6199
Standard deviation	.6092	.7234	.6578	.5418

Analysis of Variance

	DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Between groups	3	2.2604	.7535	1.8735	.1366
Within groups	147	59.1200	.4022		

Since a significant difference was found betwen male and female graduate students in their perceptions of behavior appropriate for academic work, hypothesis 3 is rejected although there were no significant differences found in graduate students' perceptions when categorized by either college or grade point average. Graduate women were found to have a significantly higher mean score than graduate men, thus indicating that they see the behaviors as being of greater concern than do the men.

To determine on what behaviors there were significant differences by sex, a one-way analysis of variance test was used on each of the 33 items within the scale. Table 4.13 summarizes the results of these tests for the behaviors where significant differences were found between men and women.

On all behaviors where significant differences were found graduate women perceived the behaviors as more serious than did graduate men. Of the four behaviors, three are the same as those which were identified by undergraduate women as being significantly more serious. The behavior identified by graduate women and not by undergraduate women is "unauthorized use of a PNC."

Hypothesis 4 states: There are no significant differences among faculty, when categorized by years of teaching and college, in their perception of behaviors appropriate for academic work. Because only 5 of 66 faculty respondents were women, the sex variable was dropped from analysis.

Table 4.13 Summary of one-way analysis of variance tests on behaviors where a significant difference was found among graduate students when categorized by sex

Behavior		DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Paid classmates for term papers to put in commercial company file	B	1	21.5354	21.5354	9.8483	.0021*
	W	143	312.6991	2.1867		
Used unauthorized PNC	B	1	15.7279	15.7279	12.3860	.0006*
	W	145	184.1224	1.2698		
Purposefully failed to do part on joint project, still received A	B	1	13.2267	13.2267	9.8070	.0021*
	W	147	199.6067	1.3487		
Had beer with instructor in hopes of getting better grade	B	1	11.7560	11.7560	10.8486	.0012*
	W	149	161.4625	1.0836		

Note: B represents between groups; W, within groups.

*Beyond significance level of .005.

The results of one-way analysis of variance tests for differences among groups within each cateogry are reported in Table 4.14.

Table 4.14 One-way analysis test for differences in the perception of faculty when categorized by years of teaching experience and college

	Years of Teaching Experience				
Group	Less than 4	4-8	9-13	14-18	More than 18
Sample size	8	12	14	12	18
Mean	3.7404	3.6237	3.7394	3.7847	3.5517
Standard deviation	.7031	.4722	.3727	.3749	.6614

Analysis of Variance

	DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Between groups	4	.5419	.1355	.4786	.7513
Within groups	59	16.7010	.2831		

	College		
Group	Business	Natural Science	Social Science
Sample size	20	18	22
Mean	3.7552	3.5996	3.6683
Standard deviation	.5866	.4145	.5573

Analysis of Variance

	DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Between groups	2	.2317	.1158	.4131	.6635
Within groups	57	15.9811	.2804		

Based on the results of these tests no significant differences were found among faculty, when categorized by years of teaching experience or college; therefore, the null hypothesis cannot be rejected.

Hypothesis 5 states: There is no significant difference between students who self-report dishonesty and those who do not in their perception of behaviors appropriate for academic work.

The results of the one-way analysis of variance test to determine if there is a significant difference in perceptions between these groups is reported in Table 4.15.

Table 4.15. One-way analysis of variance test results in comparing the perceptions of those students who self-reported dishonesty and those who did not

Group	Self-Reported Dishonesty	No Self-Reported Dishonesty
Sample size	421	319
Mean	3.2501	3.5453
Standard deviation	.5757	.6136

Analysis of Variance

	DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Between groups	1	15.8178	15.8178	45.0823	.0001*
Within groups	738	258.9387	0.3509		

*Significant beyond the .05 level.

Based on this test, a significant difference was found between groups; therefore, the null hypothesis is rejected. Those students who self-reported dishonesty were found to perceive the behaviors in the scale with less concern than those who did not self-report dishonesty.

Dishonesty Reported

Prior to reporting on the testing of the hypotheses relating to dishonesty reported, the following tables (Tables 4.16 through 4.18) are presented in an effort to give an overall picture regarding the extent of dishonesty reported.

In an effort to put these figures of dishonesty reported in context, the number of classes taken by students and taught by faculty was examined. Students were asked on the questionnaire to indicate classes taken during the year. Table 4.19 reports this information.

Using the mid-figure in each range as the average, the total number of classes taken by students in the sample is 7,574. This represents approximately 10 classes per student per year.

Faculty were asked to indicate by term and size the number of classes taught. Table 4.20 reports this information.

The number of classes taught by those in the faculty sample was 445. This represents approximately seven classes per year per faculty member. Using the mid-point in each range for class size, the number of students taught by members of the faculty sample is approximately 20,000. It is interesting to note that about 30 percent of the total student contacts were in classes of less than 40 and about 30 percent in classes of over 160.

Table 4.16 Student self-reported dishonesty by behavior

Behavior	N	Incidents							Total
		0	1	2	3	4	5	+5[a]	
Used "crib sheet" during exam	723	625	61	19	10	2	2	4	171 (98)
Copied from another during exam	722	496	112	48	26	14	4	22	494 (226)
Submitted work without giving proper credit	716	555	80	36	18	8	2	17	350 (161)
Took exam or course for another student	724	713	6	1	1	1	1	1	26 (11)
Let another copy from exam	723	542	85	46	23	2	3	22	401 (181)
Had another student take course or exam	721	554	46	9	5	1	1	5	112 (67)
Changed answers or altered evaluation	717	670	29	10	6	0	1	3	90 (47)
Submitted paper or project, not own work	724	658	46	10	7	0	0	3	105 (66)
Exchanged information during exam	722	682	15	11	5	4	0	5	98 (40)
Let another student submit their work for credit	720	630	52	21	3	6	2	6	173 (90)
									2,020

Note: Number in parentheses following total is number of students self-reporting one or more incidents of dishonesty.

[a]The number 6 was used to represent "more than 5" in tabulation.

Table 4.17 Dishonesty reported by other students by behavior

Behavior	N	Incidents							Total
		0	1	2	3	4	5	+5[a]	
Used "crib sheet" during exam	721	382	99	94	46	28	8	64	961 (339)
Copied from another during exam	723	236	65	101	76	44	9	192	1,868 (487)
Submitted work without giving proper credit	715	448	63	71	35	11	8	79	868 (267)
Took exam or course for another student	724	646	57	12	4	1	3	1	118 (78)
Let another copy from exam	722	337	78	93	70	26	7	111	1,279 (385)
Had another student take course or exam	719	713	2	0	2	1	0	2	24 (6)
Changed answers or altered evaluation	718	581	45	33	26	4	2	27	377 (137)
Submitted paper or project, not own work	726	401	119	79	49	20	6	52	846 (325)
Exchanged information during exam	722	563	56	27	26	13	4	33	458 (159)
Let another student submit their work for credit	719	468	93	56	41	14	3	44	633 (251)
									7,432

Note: Number in parentheses following total is number of students reporting one or more acts of dishonesty among other students.

[a]The number 6 was used to represent "more than 5" in tabulation.

Table 4.18 Dishonesty reported by faculty

Behavior	N	Incidents					Total
		0	1	2	3	+3[a]	
Used "crib sheet" during exam	60	55	3	1	0	1	9 (5)
Copied from another during exam	60	42	7	3	0	8	45 (18)
Submitted work without giving proper credit	63	46	6	4	1	6	41 (17)
Took exam or course for another student	63	61	2	0	0	0	2 (2)
Let another copy from exam	62	47	8	2	2	3	30 (15)
Had another student take course or exam	60	59	1	0	0	0	1 (1)
Changed answers or altered evaluation	61	54	3	2	0	2	15 (7)
Submitted paper or project, not own work	61	50	6	3	1	1	19 (11)
Exchanged information during exam	60	58	1	0	0	1	5 (2)
Let another student submit their work for credit	61	59	0	2	0	0	4 (2)
							171

Note: Number in parentheses is number of faculty reporting one or more incidents of dishonesty.

[a]The number 4 was used to represent "more than 3" in tabulation.

Table 4.19 Classes taken by students

	Number of Classes					
	1-3	4-6	7-9	10-12	13-15	More than 15
Number of students	38	80	105	307	139	55

It cannot be assumed that students and faculty are reporting dishonesty based on their experiences within the same classes, however, because the samples were randomly drawn from the student and faculty population of the same colleges, considerable overlap in class experiences might be expected. Students report approximately one incident of dishonesty per class attended while the report of faculty would be closer to one incident of dishonesty per three classes taught (.38 per class). The incidence of dishonesty self-reported would be approximately one incident per four classes attended (.27 per class). It should be kept in mind, in considering these figures, that for nine of the ten behaviors, the majority of students and faculty reported no dishonesty observed; therefore, it should be recognized that the figures represent the reporting of the minority of the sample. Likewise, for example, the figures relating to the incidents of self-reported dishonesty represent the actions of 421 individuals out of 740, and the average incidence per class, using this figure as a base, would be approximately one incident per two classes rather

Table 4.20 Classes taught by term and size

Number of Classes	Term															Total Classes	Total Students
	Fall Term					Winter Term					Spring Term						
	0	1	2	3	+3[a]	0	1	2	3	+3[a]	0	1	2	3	+3[a]		
Size of Class:																	
Less than 40	24	28	11	1	0	29	23	12	0	0	26	24	12	2	0	308	6,160
41-80	42	17	5	0	0	47	10	7	0	0	49	10	5	0	0	71	4,260
81-120	59	3	2	0	0	55	6	3	0	0	58	4	2	0	0	27	2,700
121-160	63	1	0	0	0	63	1	0	0	0	61	3	0	0	0	5	700
More than 160[b]	53	8	3	0	0	57	5	2	0	0	54	9	1	0	0	34	6,120
																445	19,990

[a]The number 4 was used to represent "more than 3" in tabulation.

[b]The number 180 was used to represent "more than 160" in tabulation.

than one per four for the total sample. As can be noted for students who self-report dishonesty, the number of incidents is approximately five (4.8) per student per year, whereas the average of the total student sample would be less than three (2.73) per student per year. Fifty-seven percent of the total student sample self-reported dishonesty during the year, graduates 27 percent and undergraduates 64 percent.

While no direct comparisons can be drawn between the acts of dishonesty observed by faculty and the acts of dishonesty about which students report they have direct knowledge, it would appear that students may be considerably more cognizant of dishonesty occurring than are faculty. In part, this may be due to the fact that student-reporting is based on contacts with peers other than in class settings, whereas faculty may be limited primarily to class contacts.

Table 4.21 reports the ranking of behaviors self-reported by students, reported by other students, and reported by faculty.

Copying and letting another copy are among the most frequently reported behaviors, regardless of the source of reporting. It is not surprising that self-reporting by students and reporting by faculty of "failure to give proper credit" is higher than reported by other students. Other behaviors where there is a difference of three or more positions in rank between the sources of reporting are: "using 'crib sheets,'" "letting another submit their work for credit," "changing answers or altering evaluation," and "submitting paper or project, not own work." It would appear that faculty and other students are not particularly aware of "ringers" in class nor are faculty aware

Table 4.21 Ranking of the frequencies of dishonest behaviors self-reported by students, reported by other students, and by faculty

Behavior	Rank		
	Self-Reported	Student-Reported	Faculty-Reported
Copied from another during exam	1	1	1
Let another copy from exam	2	2	3
Submitted work without giving proper credit	3	5	2
Used "crib sheet" during exam	4	3	6
Let another student submit their work for credit	5	6	8
Had another student take course or exam	6	10	10
Submitted paper/project, not own work	7	4	4
Changed answers or altered evaluation	8	8	5
Exchanged information during exam	9	7	7
Took course or exam for another student	10	9	9

of the amount of "cribbing" which takes place. It is interesting to note that other students and faculty rank as being more prevalent the behavior of "submitting a paper or project, not own work" than do students self-reporting behaviors. It is not surprising to find that the "submission of a paper/project which is not own work," is more a frequently discovered behavior by faculty than by other students. The ranking would suggest that it is a behavior more readily discovered by faculty than the others, perhaps with the exception of "changing answers or altering an evaluation."

Hypothesis 6 states: There are no significant differences among undergraduate students, when categorized by sex, class, college, and GPA in the incidence of dishonesty self-reported.

One-way analysis of variance tests for significant differences among groups within each category were used to test this hypothesis. A summary of findings are reported in Table 4.21.

Some significant differences were found in self-reported dishonesty among undergraduates within each category on at least one behavior; hypothesis 6 is rejected.

The results of the post hoc comparisons made to determine where there were significant differences among groups, when significant differences were found on a behavior, are reported in Table 4.23.

On nine of the ten behaviors classified as dishonest there were no significant differences between undergraduate men and women in the incidence of dishonesty self-reported. Men reported significantly more incidents on the behavior "changed answers or altered evaluation."

Table 4.22 Summary of one-way analysis of variance tests for difference in self-reported dishonesty by behavior among undergraduates when categorized by sex, class, college, and GPA

Behavior		DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
---------- Sex[a] ----------						
Used "crib sheet" during exam	B	1	0.8085	0.8085	1.3473	.2463
	W	539	323.4429	0.6001		
Copied from another during exam	B	1	2.0002	2.0002	0.9665	.3260
	W	538	1113.3535	2.0694		
Submitted work without giving proper credit	B	1	4.3417	4.3417	3.1585	.0761
	W	535	735.4014	1.3746		
Took exam or course for another student	B	1	0.0545	0.0545	0.8738	.3503
	W	538	33.5825	0.0624		
Let another student copy from exam	B	1	3.4784	3.4784	1.9776	.1602
	W	539	948.0558	1.7589		
Had another student take exam or course	B	1	0.2649	0.2649	1.9962	.1583
	W	536	71.1328	0.1327		
Changed answers or altered evaluation	B	1	1.9042	1.9042	5.1614	.0235*
	W	539	198.8500	0.3689		
Submitted paper/project, not own work	B	1	1.1300	1.1300	3.1630	.0759
	W	539	192.5631	0.3573		
Exchanged information during exam	B	1	0.0167	0.0167	0.0362	.8492
	W	538	248.0037	0.4610		
Let another student submit their work for credit	B	1	2.4652	2.4652	3.5795	.0590
	W	535	368.4547	0.6887		
---------- Class Standing[b] ----------						
Used "crib sheet" during exam	B	3	0.8632	0.2877	0.4606	.7100
	W	565	352.9962	0.6248		
Copied from another during exam	B	3	10.5264	3.5088	1.6756	.1711
	W	564	1181.0634	2.0941		
Submitted work without giving proper credit	B	3	1.3421	0.4474	0.3182	.8122
	W	560	787.2590	1.4058		
Took exam or course for another student	B	3	0.0873	0.0291	0.4887	.6903
	W	564	33.5677	0.0595		
Let another student copy from exam	B	3	10.1576	3.3859	1.8837	.1312
	W	565	1015.5437	1.7974		
Had another student take exam or course	B	3	0.1879	0.0626	0.4941	.6865
	W	562	71.2396	0.1268		
Changed answers or altered evaluation	B	3	0.7959	0.2653	0.7476	.5241
	W	565	200.5116	0.3549		
Submitted paper/project, not own work	B	3	2.1954	0.7318	2.1321	.0951
	W	564	193.5775	0.3434		
Exchanged information during exam	B	3	2.9860	0.9953	1.9220	.1249
	W	564	292.0686	0.5179		
Let another student submit their work for credit	B	3	6.8964	2.2988	3.2063	.0228*
	W	561	402.2116	0.7170		

[a]Total number of women = 297; total number of men = 240.

[b]Total number of freshmen = 149; total number of sophomores = 130; total number of juniors = 151; and total number of seniors = 138.

*Significant beyond the .05 level.

Table 4.22--Continued

Behavior		DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
College[c]						
Used "crib sheet" during exam	B	2	6.1869	3.0934	5.0210	.0069*
	W	557	343.1685	0.6161		
Copied from another during exam	B	2	9.9144	4.9572	2.3733	.0941
	W	556	1161.3629	2.0888		
Submitted work without giving proper credit	B	2	5.4749	2.7380	0.9358	.1453
	W	552	780.7223	1.4144		
Took exam or course for another student	B	2	0.0631	0.0315	0.5220	.5936
	W	556	33.5863	0.0604		
Let another student copy from exam	B	2	6.3005	3.1503	1.7291	.1784
	W	557	1014.7977	1.8219		
Had another student take exam or course	B	2	0.0286	0.0143	0.1267	.8810
	W	554	62.5674	0.1129		
Changed answers or altered evaluation	B	2	0.0546	0.0273	0.0756	.9272
	W	557	201.0811	0.3610		
Submitted paper/project not own work	B	2	0.0620	0.0310	0.0901	.9139
	W	556	191.4478	0.3443		
Exchanged information during exam	B	2	0.7046	0.3523	0.6660	.5142
	W	556	294.1255	0.5290		
Let another student submit their work for credit	B	2	0.9117	0.4559	0.6291	.5335
	W	553	400.7501	0.7247		
Grade Point Average[d]						
Used "crib sheet" during exam	B	8	25.9501	3.2438	5.6929	.0001*
	W	556	316.8039	0.5698		
Copied from another during exam	B	8	57.7972	7.2247	3.6586	.0004*
	W	555	1092.9617	1.9747		
Submitted work without giving proper credit	B	8	16.4722	2.0590	1.4942	.1562
	W	551	759.3117	1.3781		
Took exam or course for another student	B	8	0.2454	0.0307	0.9685	.4597
	W	555	17.5773	0.3170		
Let another student copy from exam	B	8	33.7725	4.2215	2.3853	.0156*
	W	556	984.0080	1.7698		
Had another student take exam or course	B	8	1.2624	0.1578	1.4226	.1839
	W	553	61.3373	0.1109		
Changed answers or altered evaluation	B	8	4.1327	0.5163	1.5264	.1449
	W	556	188.1753	0.3384		
Submitted paper/project, not own work	B	8	7.7167	0.9646	2.9107	.0035*
	W	555	183.9216	0.3314		
Exchanged information during exam	B	8	9.4395	1.1799	2.3047	.0195*
	W	555	284.1403	0.5120		
Let another student submit their work for credit	B	8	8.2863	1.0358	1.4787	.1619
	W	555	386.6692	0.7005		

[c]Total numbers in Business = 191; total numbers in Natural Science = 190; and total numbers in Social Science = 175.

[d]Number of students by GPA ranges: 1.76-2.00 = 24; 2.01-2.25 = 25; 2.26-2.50 = 68; 2.51-2.75 = 84; 2.76-3.00 = 96; 3.01-3.25 = 102; 3.26-3.50 = 85; 3.51-3.75 = 58; 3.76-4.00 = 23

*Significant beyond the .05 level.

Table 4.23 Post hoc comparisons for differences among undergraduates, when categorized by class, college, and GPA, in the incidence of self-reported dishonesty by behavior

Behavior	Group	Mean	Class		
			Sophomores	Juniors	Seniors
Let another student submit their work for credit	Freshmen Sophomores Juniors Seniors	.1081 .3984 .3421 .2409	.2903 (.2869)[a]	.2340 (.2745) .0563 (.1939)	.1328 (.2818) .1575 (.2922) .1012 (.2800)

Behavior	Group	Mean	College	
			Natural Science	Social Science
Used "crib sheet" during exam	Business Natural Science Social Science	.4093 .1719 .2114	.2374 (.1963)	.1979 (.2010) .0395 (.2013)

Behavior	GPA Group	Mean	Grade Point Average				
			2.51-2.75	2.76-3.00	3.01-3.25	3.51-3.75	3.76-4.00
Used "crib sheet" during exam	2.01-2.25	1.2000	--	1.0542 (.6700)[a]	1.5290 (.6659)[a]	--	1.0261 (.1862)[a]
	2.76-3.00	0.1458	--	--	--	--	--
	3.01-3.25	0.1471	--	--	--	--	--
	3.76-4.00	0.1739	--	--	--	--	--
Copied from another during exam	1.76-2.00	1.0400	--	--	--	--	0.8610 (1.605)
	2.01-2.25	1.2609	--	--	--	--	1.0870 (.1638)
	2.26-2.50	1.5294	--	--	--	--	1.3550 (.1340)[a]
	3.76-4.00	0.1739	--	--	--	--	--
Let another student copy from exam	1.76-2.50	1.0680	--	--	--	--	0.8307 (1.222)
	2.26-2.50	1.1323	--	--	--	--	0.9050 (1.290)
	3.76-4.00	0.2273	--	--	--	--	--
Submitted paper/ project not own work	2.01-2.25	0.6667	0.5373 (.5260)[a]	--	--	0.6150 (.5523)[a]	0.6667 (.6640)[a]
	2.51-2.75	0.1294	--	--	--	--	--
	3.51-3.75	0.0517	--	--	--	--	--
	3.76-4.00	0	--	--	--	--	--
Exchanged information during exam	2.26-2.50	0.4328	--	--	--	0.3983 (.5072)	0.4328 (.6872)
	3.51-3.75	0.0345	--	--	--	--	--
	3.76-4.00	0	--	--	--	--	--

[a]Mean difference beyond critical difference.

Although significance was not found on the other nine behaviors, on all the behaviors the mean of incidents was higher for men than for women.

The incidence of dishonesty was greater for sophomores than freshmen on the behavior "let another student submit their work for credit." No other significant differences were found between classes on the other nine behaviors; however, on six of the nine behaviors sophomores had the highest mean of incidents.

Students in the College of Business were found to report a significantly higher incidence of "using 'crib sheets' during exam" than students in Natural Science. On five of the remaining nine behaviors, the incidence of self-reported dishonesty was higher for students in the College of Business than in the College of Natural Science or Social Science.

Although significant differences were found on five behaviors by GPA, on only three behaviors could the differences be identified using the Scheffé post hoc procedure. "Used 'crib sheet' during exam" was found to be more prevalent with students in the GPA range of 2.01-2.25 than with students with GPA's between 2.76 and 3.25 and 3.76-4.00. "Copying on an exam" was found to be significantly more prevalent among students in the GPA range of 2.26-2.50 than those with GPA's between 3.76 and 4.00. "Submitted paper/project not own work" was significantly more prevalent among those students in the GPA range of 2.01-2.25 than those with GPA's between 2.50 and 2.75 and those with GPA's over 3.51.

In addition to examining the incidence of dishonesty among undergraduates by sex, class, college, and GPA, one-way analysis of variance tests were run to determine if there were significant differences between preprofessional students and nonpreprofessional students. The results of these tests, which are reported in Table 4.24 show no significant difference between groups on any of the behaviors categorized as dishonest. On seven of the ten behaviors, however, the mean scores for preprofessional students were higher, thus perhaps indicating a trend. The three behaviors where preprofessional student mean scores were not higher are: (1) submitted paper/project, not own work; (2) exchanged information during exam; and (3) let another student submit their work for credit.

Hypothesis 7 states: There are no significant differences among graduate students, when categorized by sex, college, or GPA in the incidence of dishonesty self-reported by behavior.

One-way analysis of variance tests were employed to determine differences among groups by category. The summary of these tests are reported in Table 4.25.

The results of these tests show no significant differences among graduates when categorized by sex or college. On one of the ten behaviors classified as dishonest, a significant difference was found by GPA; however, the Scheffé post hoc procedure failed to identify where there were differences between groups. Although a significant difference was found on one behavior in one category, it was not deemed appropriate to reject the null hypothesis on this basis, particularly in light of

Table 4.24 Summary of one-way analysis of variance tests for differences between preprofessional students and nonpreprofessional students[a] in the incidence of dishonesty self-reported

Behavior		DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Used "crib sheet" during exam	B	1	0.9667	0.9667	1.5701	.2107
	W	555	345.2280	0.6220		
Copied from another during exam	B	1	7.2405	7.2405	3.6046	.0581
	W	555	1114.8349	2.2009		
Submitted work without giving proper credit	B	1	0.0102	0.0102	0.0075	.9310
	W	551	748.1381	1.3578		
Took exam or course for another student	B	1	0.1699	0.1699	2.8118	.0941
	W	554	33.4776	0.0604		
Let another student copy from exam	B	1	1.7179	1.7179	0.9422	.3321
	W	555	1011.8979	1.8232		
Had another student take exam or course	B	1	0.2363	0.2363	1.8603	.1731
	W	552	70.2416	0.1272		
Changed answers or altered evaluation	B	1	0.0209	0.0209	0.0581	.8096
	W	555	199.6093	0.3697		
Submitted paper/project, not own work	B	1	0.0810	0.0810	0.2468	.6196
	W	554	181.9244	0.3284		
Exchanged information during exam	B	1	0.2660	0.2660	0.5157	.4730
	W	554	285.7394	0.5158		
Let another student submit their work for credit	B	1	0.0185	0.0185	0.0261	.8718
	W	551	393.9054	0.7149		

Note: B represents between groups; W, within groups.

[a]Preprofessional students = 211; nonpreprofessional students = 346.

Table 4.25 Summary of one-way analysis of variance tests to determine differences in self-reported dishonesty by graduate students when categorized by sex, college, and GPA

Behavior		DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Sex[a]						
Used "crib sheet" during exam	B	1	0.4898	0.4898	1.3931	.2398
	W	145	50.9796	0.3516		
Copied from another during exam	B	1	0.1021	0.1021	0.2001	.6553
	W	145	73.9388	0.5099		
Submitted work without giving proper credit	B	1	1.1533	1.1533	0.7896	.3757
	W	144	210.3261	1.4606		
Took exam or course for another student	B	1	0.0530	0.0530	0.2112	.6465
	W	146	36.6160	0.2508		
Let another student copy from exam	B	1	1.3111	1.3111	3.1637	.0774
	W	145	60.0903	0.4144		
Had another student take exam or course	B	1	0.1224	0.1224	0.4983	.4814
	W	145	35.6327	0.2457		
Changed answers or altered evaluation	B	1	0.2813	0.2813	0.9349	.3352
	W	142	42.7187	0.3008		
Submitted paper/project, not own work	B	1	0.0272	0.0272	0.0889	.7659
	W	147	45.0063	0.3063		
Exchanged information during exam	B	1	0.0804	0.0804	0.3110	.5779
	W	145	37.4842	0.2585		
Let another student submit their work for credit	B	1	0.2436	0.2436	0.4955	.4826
	W	146	71.7769	0.4916		
College[b]						
Used "crib sheet" during exam	B	2	0.9674	0.4837	1.3672	.2581
	W	145	51.3028	0.3538		
Copied from another during exam	B	2	1.2189	0.6095	1.2130	.3003
	W	145	72.8554	0.5025		
Submitted work without giving proper credit	B	2	2.0975	1.0488	0.7208	.4881
	W	144	209.5079	1.4549		
Took exam or course for another student	B	2	0.6319	0.3160	1.2800	.2811
	W	146	36.0392	0.2468		
Let another student copy from exam	B	2	1.8815	0.9408	1.4600	.2356
	W	145	93.4360	0.6444		
Had another student take exam or course	B	2	0.4626	0.2313	0.9503	.3890
	W	145	35.2941	0.2434		
Changed answers or altered evaluation	B	2	0.5025	0.2512	0.8335	.4366
	W	141	42.4975	0.3014		
Submitted paper/project, not own work	B	2	0.7644	0.3822	1.2689	.2842
	W	147	44.2756	0.3012		
Exchanged information during exam	B	2	0.3489	0.1745	0.6797	.5084
	W	145	37.2186	0.2567		
Let another student submit their work for credit	B	2	1.5115	0.7557	1.5644	.2127
	W	146	70.5288	0.4831		

Note: B represents between groups; W, within groups.

[a]Total graduate women = 49; total graduate men = 100.

[b]Number of graduates in Business = 44; Natural Science = 52; Social Science = 53.

Table 4.25--Continued

Behavior		DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
---------- Grade Point Average[a] ----------						
Used "crib sheet" during exam	B	3	0.7437	0.2479	0.7297	.5359
	W	141	47.9045	0.3397		
Copied from another during exam	B	3	4.5450	1.5151	3.1052	.0286*
	W	141	68.7929	0.4873		
Submitted work without giving proper credit	B	3	2.7978	0.9326	0.6954	.5564
	W	140	187.7578	1.3411		
Took exam or course for another student	B	3	0.4670	0.1557	0.6107	.6092
	W	142	36.1974	0.2549		
Let another student copy from exam	B	3	0.8465	0.2822	0.4783	.6979
	W	141	83.1811	0.5899		
Had another student take exam or course	B	3	0.5343	0.1781	0.7131	.5457
	W	141	35.2174	0.2498		
Changed answers or altered evaluation	B	3	0.2478	0.0825	0.2667	.8493
	W	138	42.7382	0.3097		
Submitted paper/project, not own work	B	3	0.6298	0.2099	0.6894	.5600
	W	143	43.5472	0.3045		
Exchanged information during exam	B	3	0.7244	0.2415	0.9244	.4308
	W	141	36.8342	0.2612		
Let another student submit their work for credit	B	3	0.7797	0.2599	0.7907	.5010
	W	142	46.6792	0.3287		

Note: B represents between groups; W, within groups.

[a]Number of graduates by GPA range: 3.00-3.25 = 13; 3.26-3.50 = 38; 3.51-3.75 = 46; 3.76-4.00 = 50.

*Significant beyond the .05 level.

the fact that differences between groups could not be identified through the post hoc procedure selected for use in this study.

Hypothesis 8 states: There is no significant difference between students who self-report dishonesty and those who do not in the incidence of dishonesty reported among other students.

A one-way analysis of variance test was used with each dishonest behavior to determine if there was a significant difference between groups. Table 4.26 summarized the results of these tests.

Based on the results of these tests the null hypothesis is rejected. Those students who self-report dishonesty were found to report significantly more dishonesty among others than those did who did not self-report dishonest behaviors.

Conditions Cited by Students as Being Present When Dishonesty Occurred

General information regarding the conditions which students cited when dishonesty occurred is presented prior to the results of the hypothesis testing in this area. Table 4.27 reports the number of times the condition was cited for each dishonest behavior and also gives the percentage of times the condition was cited by each student who reported engaging in the behavior.

As can be noted, "little chance of discovery" is much more frequently cited than any other condition (537). "Work difficult" is cited second in frequency, followed by "behavior not different than other students." It is interesting to note that the conditions

Table 4.26 Summary of one-way analysis of variance tests, by behavior, for significant differences between students who self-reported dishonesty and those who did not in dishonesty reported among others[a]

Behavior		DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Used "crib sheet" during exam	B	1	208.9912	208.9912	62.9120	.0001*
	W	719	2351.1198	3.2700		
Copied from another during exam	B	1	632.7216	632.7216	129.0514	.0001*
	W	721	3534.9658	4.9029		
Submitted work without giving proper credit	B	1	235.6481	235.6481	64.8061	.0001*
	W	713	2592.6121	3.6362		
Took exam or course for another student	B	1	3.7891	3.7891	11.1671	.0009*
	W	722	244.9789	0.3393		
Let another student copy from exam	B	1	425.0946	425.0946	102.8386	.0001*
	W	726	2976.1977	4.1336		
Had another student take exam or course	B	1	2.0335	2.0335	4.4759	.0347*
	W	719	326.6545	0.4543		
Changed answers or altered evaluation	B	1	38.0063	38.0063	21.5794	.0001*
	W	716	1261.0424	1.7612		
Submitted paper/project, not own work	B	1	162.6193	162.6193	56.8900	.0001*
	W	724	2069.5460	2.8585		
Exchanged information during exam	B	1	53.9387	53.9387	25.0630	.0001*
	W	720	1549.5294	2.1521		
Let another student submit their work for credit	B	1	111.3426	111.3426	43.2394	.0001*
	W	717	1846.2958	2.5750		

Note: B represents between groups; W, within groups.

[a]Students self-reporting dishonest behavior = 419; students not self-reporting dishonest behavior = 308.

*Significance beyond .05 level.

Table 4.27 Conditions cited when dishonesty occurred

Behavior	Course Interesting	No Discovery	Work Difficult	Behavior Not Different	Honesty Stressed	Competition Keen	Unprepared	Meaningless	Instructor Fair and Reasonable	Needed Better Grade	Number of Students
Used "crib sheet" during exam	16 (16.3)	49 (50.0)	46 (46.9)	24 (24.5)	2 (2.0)	27 (27.6)	47 (48.0)	14 (14.3)	14 (14.3)	41 (41.8)	98
Copied from another during exam	43 (19.0)	126 (55.8)	113 (50.0)	87 (38.5)	9 (4.0)	58 (25.7)	76 (33.6)	38 (16.8)	29 (12.8)	79 (35.0)	226
Submitted work without giving proper credit	31 (19.3)	110 (68.3)	27 (16.8)	53 (32.9)	4 (2.5)	13 (8.1)	22 (13.7)	40 (24.8)	18 (11.2)	16 (9.9)	161
Took exam or course for another student	0 (0)	4 (36.4)	4 (36.4)	2 (18.0)	0 (0)	2 (18.0)	2 (18.0)	1 (9.0)	0 (0)	2 (18.0)	11
Let another student copy from exam	36 (19.9)	108 (59.7)	67 (37.0)	50 (27.6)	8 (4.4)	24 (13.3)	17 (9.4)	28 (15.5)	22 (12.2)	12 (6.6)	181
Had another student take exam or course	1 (11.5)	3 (54.5)	3 (54.5)	2 (33.0)	2 (33.0)	1 (11.5)	3 (54.5)	1 (11.5)	0 (0)	2 (63.0)	67
Changed answers or altered evaluation	12 (25.5)	28 (59.6)	16 (34.0)	14 (29.8)	2 (4.3)	10 (21.3)	8 (17.0)	12 (25.5)	8 (17.0)	14 (29.8)	47
Submitted paper/ project, not own work	7 (10.6)	39 (59.1)	17 (25.8)	19 (28.8)	0 (0)	8 (12.1)	22 (33.3)	25 (37.9)	3 (4.5)	19 (29.7)	66
Exchanged information during exam	8 (20.0)	21 (52.5)	20 (50.0)	13 (32.5)	1 (2.5)	11 (27.5)	8 (20.0)	3 (7.5)	5 (12.5)	12 (30.0)	40
Let another student submit their work for credit	12 (13.3)	49 (54.4)	19 (21.1)	19 (21.1)	2 (2.2)	9 (10.0)	9 (10.0)	24 (26.7)	6 (6.6)	4 (4.4)	90
Totals	166 (7.5)	537 (24.2)	332 (15.0)	283 (12.8)	30 (0.1)	163 (7.4)	214 (9.7)	186 (8.4)	105 (4.7)	201 (9.0)	

Note: Number in parentheses is the percentage of those who cited the condition for the behavior; the number underlined at the end of the percentage row is the number of students who reported the behavior.

ranked fourth and fifth ("unprepared" and "needing better grade than could be earned") are conditions which relate directly to status of the individual, not conditions of the situation. A relatively low percentage of students thought that courses in which dishonesty occurred were "interesting" or "meaningful" and fewer still cited the condition "instructor reasonable and fair." "Competition keen among classmates" was ranked eighth in terms of conditions cited, which is lower than might have been anticipated considering the current discussion among students regarding the pressure for grades. It may be, however, that the pressure for grades is not that directly related to competition among classmates.

Perhaps, in addition to the high percentage of students who felt that there was little chance of their behavior being discovered, the other observation of greatest interest is that students rarely reported that "honesty was stressed by the instructor." Whether greater emphasis on honesty by faculty and/or closer monitoring of situations would, in fact, reduce the incidence of dishonesty is not known; however, these observations warrant further study into ways in which faculty might influence the incidence of dishonesty among students.

Because of the high frequency with which "little chance of discovery" was cited, a ranking of behaviors by the percentage of students who listed the condition as being present when the behavior occurred is presented in Table 4.28.

Table 4.28 Rank order of behaviors where "little chance of discovery" was cited

Rank	Behavior	Percentage Listing Condition
1	Submitted work without giving proper credit	68.3
2	Let another copy from exam	59.7
3	Changed answer or altered evaluation	59.6
4	Submitted paper/project not own work	59.1
5	Copied from another during exam	55.8
6	Had another student take exam or course	54.5
7	Let another student submit their work for credit	54.4
8	Exchanged information during exam	52.5
9	Used "crib sheets" during exam	50.0
10	Took exam or course for another student	36.4

From the ranking it can be noted that students see the greatest risk of detection in "taking an exam or course for someone else," with the smallest risk of detection reported for "submitting work without giving proper credit."

Although there are some differences in the percentage of students who cite the condition by a particular behavior, it is important to note the consistency with which the condition is cited across all behaviors.

Hypothesis 9 states: There are no significant differences among undergraduates, when categorized by class, college, or GPA, in the conditions cited when dishonesty occurred.

One-way analysis of variance tests were performed on all conditions to determine differences among groups within each category. A summary of these tests is reported in Table 4.29.

Table 4.29 Summary of one-way analysis of variance tests for differences among undergraduates, when categorized by class, college, and GPA, in conditions cited when dishonesty occurred

Conditions	DF		Sum of Squares	Mean Square	F-Ratio	F-Probability
---------- Class[a] ----------						
Course interesting	B	3	4.7936	1.5979	2.9173	.0341*
	W	373	204.2992	0.5477		
Little chance of discovery	B	3	6.7214	2.2405	1.4088	.2398
	W	373	593.1831	1.5903		
Test/assignment difficult	B	3	9.1899	3.0633	3.7086	0118*
	W	373	308.9040	0.8260		
Behavior not different than others	B	3	2.4200	0.8067	1.0844	.3556
	W	373	277.4686	0.7439		
Honesty stressed by instructor	B	3	0.3530	0.1177	0.9631	.4102
	W	373	45.5674	0.1222		
Competition keen	B	3	0.3562	0.1187	0.2110	.8888
	W	373	209.9090	0.5628		
I was unprepared	B	3	0.1637	0.0546	0.0801	.9708
	W	373	254.0698	0.6812		
Test/assignment meaningless	B	3	3.2103	1.0701	1.5685	.1966
	W	373	254.4820	0.6823		
Instructor reasonable and fair	B	3	0.6571	0.2190	0.5882	.6231
	W	373	138.8973	0.3724		
Needed better grade than could earn	B	3	4.3282	1.4427	2.1533	.0931
	W	373	249.9158	0.6700		
---------- College[b] ----------						
Course interesting	B	2	0.1961	0.0980	0.1734	.8409
	W	367	207.5364	0.5655		
Little chance of discovery	B	2	7.2367	3.6183	2.2914	.1026
	W	367	579.5309	1.5791		
Test/assignment difficult	B	2	10.4414	5.2207	6.4190	.0018*
	W	367	298.4883	0.8133		
Behavior not different than others	B	2	2.4135	1.2068	1.6104	.2012
	W	367	275.0162	0.7494		
Honesty stressed by instructor	B	2	0.0627	0.0313	0.2732	.7611
	W	367	42.1103	0.1147		
Competition keen	B	2	0.5728	0.2864	0.5042	.6044
	W	367	208.4542	0.5680		
I was unprepared	B	2	0.0904	0.0452	0.0668	.9354
	W	367	248.3420	0.6767		
Test/assignment meaningless	B	2	2.7308	1.3654	1.9946	.1375
	W	367	251.2394	0.6846		
Instructor reasonable and fair	B	2	0.5472	0.2736	0.7248	.4851
	W	367	138.5446	0.3775		
Needed better grade than could earn	B	2	0.8528	0.4264	0.6372	.5294
	W	367	245.6039	0.6692		

Note: B represents between groups; W, with groups.

[a]Number of freshmen = 106; sophomores = 96; juniors = 92; seniors = 83.

[b]Number of students in Business = 141; Natural Science = 117; Social Science = 112.

*Significant beyond the .05 level.

Table 4.29--Continued

Conditions		DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
----------Grade Point Average[c]----------						
Course interesting	B	8	1.7650	0.2206	0.3886	.9265
	W	364	206.6533	0.5677		
Little chance of discovery	B	8	13.1178	1.6397	1.0205	.4199
	W	364	584.8500	1.6067		
Test/assignment difficult	B	8	9.8437	1.2305	1.4940	.1577
	W	364	299.7863	0.8236		
Behavior not different than others	B	8	6.5976	0.8247	1.1057	.3585
	W	364	271.4989	0.7456		
Honesty stressed by instructor	B	8	0.8863	0.1108	1.1067	.3578
	W	364	36.4381	0.1001		
Competition keen	B	8	4.0314	0.5039	0.9028	.5141
	W	364	203.1696	0.5582		
I was unprepared	B	8	11.4457	1.4307	2.2090	.0262*
	W	364	235.7500	0.6477		
Test/assignment meaningless	B	8	2.5200	0.3150	0.4509	.8898
	W	364	254.3111	0.6987		
Instructor reasonable and fair	B	8	0.5969	0.0746	0.1958	.9914
	W	364	138.6954	0.3810		
Needed better grade than could earn	B	8	11.3995	1.4249	2.2185	.0256*
	W	364	233.7962	0.6423		

Note: B represents between groups, W, within groups.

[c]Numbers of students by GPA ranges:

1.76-2.00 = 22	2.51-2.75 = 55	3.26-3.50 = 55
2.01-2.25 = 17	2.76-3.00 = 69	3.51-3.75 = 37
2.26-2.50 = 47	3.01-3.25 = 58	3.76-4.00 = 13

*Significant beyond the .05 level.

Significant differences were found on two conditions by class, one by college, and two by GPA. Based on these findings Hypothesis 9 is rejected.

Where significant differences were found using the one-way analysis of variance test, post hoc tests were performed to determine where there were differences among groups. The results of these post hoc tests are reported in Table 4.30.

Based on the post hoc tests significant differences were found between freshmen and seniors on the condition "test/assignment difficult." Freshmen cited this condition more frequently than did seniors. On the condition "courses interesting" the analysis of variance test showed significance between classes; however, the Scheffé post hoc procedure did not identify where the differences among groups existed. In comparing mean scores, however, it can be noted that sophomores and juniors cited this condition more often than did freshmen or seniors.

Students in the College of Social Science cited the condition "test/assignment difficult" significantly more often than did students in either the College of Business or Natural Science.

Significant differences were found on the conditions "unprepared" and "needed better grade than could earn" where GPA groups were compared. It can be noted that those students with GPA's of 3.76-4.00 cited these conditions less frequently than did those with GPA's between 2.01 and 2.50; however, the mean differences were not beyond the critical differences calculated using the selected post hoc procedure.

Table 4.30 Post hoc comparisons for differences among undergraduates in conditions cited when dishonesty occurred

Conditions	Group	Mean	Class		
			Sophomores	Juniors	Seniors
Course interesting	Freshmen	.2925	.2388 (.2927)	.2184 (.2960)	.0087 (.3045)
	Sophomores	.5313		.0204 (.3031)	.2301 (.3114)
	Juniors	.5109			.2097 (.3145)
	Seniors	.3012			
Test assignment difficult	Freshmen	.9906	.1885 (.3594)	.2949 (.3635)	.4243 (.3739)[a]
	Sophomores	.8021		.1064 (.3722)	.2358 (.3824)
	Juniors	.6957			.1294 (.3862)
	Seniors	.5663			

Condition	Group	Mean	College	
			Natural Science	Social Science
Test/assignment difficult	Business	0.6454	.0384 (.2775)	.3814 (.2809)[a]
	Natural Science	0.6838		.3430 (.2934)[a]
	Social Science	1.0268		

Conditions	GPA Group	Mean	Grade Point Average	
			2.26-2.50	2.76-4.00
Unprepared	2.01-2.25	0.8235	.1001 (.9036)	.6697 (1.1763)
	2.26-2.50	0.7234		.5696 (1.0005)
	3.76-4.00	0.1538		
Needed better grade than could earn	2.01-2.25	1.0000	.234 (.9)	.7692 (1.1713)
	2.26-2.50	0.7660		.5352 (.9963)
	3.76-4.00	0.2308		

[a]Mean difference beyond critical difference.

In addition to categorizing the undergraduates by class, college, and GPA, an analysis of variance test was run to determine if there were significant differences in the conditions cited when dishonesty occurs between students in preprofessional programs and those not in such programs. Table 4.31 reports the results of this test.

On none of the 10 conditions were there significant differences found between students enrolled in preprofessional programs and those who were not. "Competition keen among classmates" is one condition on which a difference might have been expected in view of the frequency with which preprofessional students discuss the pressure of competition for entry into professional schools.

Hypothesis 10 states: There are no significant differences among graduates, when categorized by college or GPA, in the conditions cited when dishonesty occurred.

One-way analysis of variance tests were performed on all conditions to determine differences among groups within each category. A summary of these tests are reported in Table 4.32.

The results of these tests show that there were two conditions where there was a significant difference found by college. Based on these findings Hypothesis 10 is rejected.

Table 4.31 Summary of one-way analysis of variance test for difference between preprofessional students and nonpreprofessional students in conditions cited when dishonesty occurred[a]

Conditions		DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
Course interesting	B	1	0.0002	0.0002	0.0003	.9862
	W	367	207.5608	0.5656		
Little chance of discovery	B	1	3.7179	3.7179	2.3326	.1276
	W	367	584.9704	1.5939		
Test/assignment difficult	B	1	0.0137	0.0137	0.0167	.8973
	W	367	301.9429	0.8227		
Behavior not different from others	B	1	0.0318	0.0318	0.0432	.8354
	W	367	269.9682	0.7556		
Honesty stressed by instructor	B	1	0.0567	0.0567	0.4539	.5009
	W	367	45.8187	0.1248		
Competition keen	B	1	0.6724	0.6724	1.2265	.2688
	W	367	201.2030	0.5482		
I was unprepared	B	1	0.0512	0.0512	0.0763	.7825
	W	367	246.0464	0.6704		
Test/assignment meaningless	B	1	0.7391	0.7391	1.0727	.3010
	W	367	252.8598	0.6890		
Instructor reasonable and fair	B	1	0.1480	0.1480	0.4088	.5230
	W	367	132.9142	0.3622		
Needed better grade than could earn	B	1	0.0028	0.0028	0.0044	.9472
	W	367	238.1327	0.6489		

Note: B represents between groups; W, within groups.

[a]Number of preprofessional students = 142; number of nonpreprofessional students = 227.

Table 4.32 Summary of one-way analysis of variance tests for differences among graduates, when categorized by college or GPA, in the conditions cited when dishonesty occurred

Conditions		DF	Sum of Squares	Mean Square	F-Ratio	F-Probability
----------College[a]----------						
Course interesting	B	2	0.3390	0.1695	0.4698	.6287
	W	38	13.7098	0.3608		
Little chance of discovery	B	2	11.7837	5.8918	2.1156	.1345
	W	38	105.8261	2.7849		
Test/assignment difficult	B	2	20.3266	10.1633	3.9620	.0274*
	W	38	97.4783	2.5672		
Behavior not different than others	B	2	6.9356	3.4678	1.3508	.2712
	W	38	97.5522	2.5672		
Honesty stressed by instructor	B	2	0.3024	0.1512	1.5962	.2160
	W	38	3.6000	0.0947		
Competition keen	B	2	18.8396	9.4198	3.9161	.0284*
	W	38	91.4043	2.4054		
I was unprepared	B	2	11.2731	5.6365	2.2728	.1169
	W	38	94.2391	2.4800		
Test/assignment meaningless	B	2	1.1182	0.5591	1.8687	.1682
	W	38	11.3696	0.2992		
Instructor reasonable and fair	B	2	0.1363	0.0682	0.1740	.8410
	W	38	14.8880	0.3918		
Needed better grade than could earn	B	2	1.6085	0.8042	1.3134	.2808
	W	38	23.2696	0.6124		
---------- Grade Point Average[b] ----------						
Course interesting	B	3	1.6578	0.5526	1.6760	.1905
	W	34	11.2106	0.3297		
Little chance of discovery	B	3	4.4699	1.4900	0.5040	.6821
	W	34	100.5038	2.9560		
Test/assignment difficult	B	3	6.2411	2.0804	0.6760	.5727
	W	34	104.6273	3.0773		
Behavior not different than others	B	3	6.1249	2.0416	0.7077	.5541
	W	34	98.0856	2.8849		
Honesty stressed by instructor	B	3	0.1614	0.0538	0.4900	.6916
	W	34	3.7333	0.1098		
Competition keen	B	3	10.9904	3.6635	1.2910	.2933
	W	34	96.4833	2.8377		
I was unprepared	B	3	3.3388	1.1129	0.3794	.7685
	W	34	99.7402	2.9335		
Test/assignment meaningless	B	3	1.1506	0.3835	1.2227	.3164
	W	34	10.6652	0.3137		
Instructor reasonable and fair	B	3	0.7340	0.2447	0.6125	.6116
	W	34	13.5818	0.3995		
Needed better grade than could earn	B	3	2.9742	0.9914	1.5872	.2105
	W	34	21.2364	0.6247		

Note: B represents between groups; W, within groups.

[a]Number of students in Business = 8; Natural Science = 10; Social Science = 23.

[b]Number of students by GPA ranges: 3.01-3.25 = 4; 3.26-3.50 = 8; 3.51-3.75 = 15; 3.76-4.00 = 11.

*Significant beyond the .05 level.

The post hoc tests on those conditions where significant differences were found by college revealed that graduate students in the College of Natural Science cited the condition of "test/assignment difficult" more frequently than graduate students in the College of Business. A significant difference was also found on the condition "competition keen." Graduate students in the College of Natural Science cited this more frequently than those in the College of Social Science.

The results of the post hoc tests are reported in Table 4.33.

Table 4.33 Post hoc comparisons for differences among graduate students in conditions cited when dishonesty occurred

Condition	Group	Mean	College	
			Natural Science	Social Science
Test/ assignment difficult	Business Nat. Science Soc. Science	0 2.0000 0.6087	2.000 (1.9339)[a]	0.6087 (1.6739) 1.3913 (1.5443)
Competition keen	Business Nat. Science Soc. Science	0 1.7000 0.1739	1.700 (1.8728)	0.1739 (1.6205) 1.5261 (1.4955)[a]

[a]Mean difference beyond critical difference.

Actions Taken by Faculty When Dishonesty Was Discovered

Hypothesis 11 states: There is no significant variance among faculty in the seriousness of actions which they take when a dishonest behavior is observed or discovered.

In order to test this hypothesis the average of the ratings given by each faculty member for a particular behavior was determined. The variance in actions was computed and a Chi Square test was used to determine significance. The results of these tests are reported in Table 4.34.

On three behaviors, action was taken by only one faculty member. These behaviors were: (1) exchanged information during exam; (2) allowed another student to submit their work for credit; and (3) had another student take exam/course.

Of the remaining seven behaviors significant variance was found on five. Based on these findings Hypothesis 13 is rejected. The writer, however, questions the strength of these findings because of the limited number of faculty members who observed behaviors and reported actions taken. It would appear that there is considerable variance in the actions which faculty take when a particular behavior is observed or discovered; however, further study in this area is needed to investigate the consistency with which actions are taken and to better understand the nature of the circumstances that guide a faculty member in deciding what course of action to follow.

Table 4.34 Variance in faculty actions, by behavior

Behavior	Computation	DF	Significance Level
Used "crib sheets" during exam	$x^2 = \frac{4(1.3)}{.5} = 10.4$	4	.05
Copied from another during exam	$x^2 = \frac{16(2.6)}{.5} = 83.2$	16	.001
Submitted work without giving proper credit	$x^2 = \frac{15(.95)}{.5} = 28.5$	15	.05
Took exam or course for another student	$x^2 = \frac{2(1.33)}{.5} = 5.32$	2	Not significant
Let another student copy from exam	$x^2 = \frac{12(.66)}{.5} = 15.84$	12	Not significant
Changed answers or altered evaluation	$x^2 = \frac{11(2.57)}{.5} = 56.54$	11	.001
Submitted paper/ project, not own work	$x^2 = \frac{6(2.24)}{.5} = 26.88$	6	.001

Note: Formula used in computations:

$$x^2 = \frac{(n-1)s^2}{\sigma^2}$$

σ^2 = value of population variance specified; and

s^2 = sample variance.

Based on the data reported in Table 4.35, mean scores were computed to show the seriousness of the action taken for each behavior. The mean scores were based on the following values assigned to the actions:

1 = no action,

2 = warning,

3 = repeat assignment,

4 = penalty or failing grade on assignment,

5 = penalty or failing grade for course,

6 = referred for University disciplinary action, and

7 = other.

No value was given to "other" in computing mean scores.

The ordering of the behaviors by the seriousness of the action taken is reported in Table 4.36.

An inspection of the modes suggest that for the first three behaviors students might most often expect to receive a penalty grade on the assignment. A "warning" is the sanction most generally given for four other behaviors. Again, caution must be exercised in drawing general conclusions from these observations because of limitations of numbers. Several faculty members commented on the questionnaires that, although they believed dishonest behaviors occurred, they lacked proof. It may be that no action was taken or warnings were given based on observations which they did not believe they could support if required or requested to do so. The findings may also suggest, however, that the actions which were reported reflected what the faculty believed

Table 4.35 Faculty actions taken, by behavior

Behavior	No Action	Warning	Repeat Assignment	Penalty/Failing Grade--Assignment	Penalty/Failing Grade--Course	Referred for University Disciplinary Action	Other	Total
Used "crib sheets" during exam	1	3	2	1				7
Copied from another during exam	6	12		3	8			29
Submitted work without giving proper credit	2	13	6	9				30
Took exam or course for another student	1	1						2
Let another student copy from exam	10	9		4			2	25
Had another student take exam or course			1					1
Changed answers or altered evaluation	1	1	1	7	1	2		13
Submitted paper/project, not own work	2	1	3	10		1		17
Exchanged information during exam	1			3				4
Let another student submit their work for credit		2						2
Total	24	42	13	37	9	3	2	130

Table 4.36 Rank order of behaviors by the seriousness of action taken

Behavior	Mean	Mode
Changed answers or altered evaluation	3.923	4
Submitted paper or project, not own work	3.471	4
Exchanged information during exam	3.250	4
Had another student take course or exam	3.000[a]	3
Copied from another during exam	2.823	2
Submitted work without giving proper credit	2.733	2
Used "crib sheets" during exam	2.429	2
Let another student submit their work for credit	2.000[a]	2
Let another student copy during exam	1.913	1
Took exam or course for another student	1.500[a]	-

[a]Only one or two incidents reported.

was an appropriate action for a behavior which was, or could have been, substantiated. If one assumes that the action taken reflects what the faculty deemed appropriate, the question could be raised as to whether a student might choose to "gamble" if the most severe sanction might be a penalty grade, particularly if there was little possibility of a good grade being earned.

CHAPTER V

SUMMARY, FINDINGS AND DISCUSSION, CONCLUSIONS AND IMPLICATIONS, AND RECOMMENDATIONS FOR FURTHER RESEARCH

Summary

The primary purpose for undertaking the study was to gain an understanding about how students and faculty at Michigan State University define dishonesty and to secure information regarding the incidence of dishonesty among students. An effort was also made to explore the conditions which students believe existed when dishonesty occurred and the actions which faculty took when dishonesty was discovered.

The questions which were formulated to guide the writer in the development of the study are as follows:

1. Are there significant differences between students and faculty in their perceptions of behaviors which violate an appropriate standard for academic work?
2. Are there significant differences among students in their perceptions of behaviors which violate an appropriate standard for academic work when categorized by class standing, college, grade point average, or sex?

3. Are there significant differences among faculty in their perceptions of behaviors which violate an appropriate standard for academic work when categorized by college, sex, or years of college teaching experience?
4. What are the characteristics of the behaviors which are perceived by students and faculty to be serious violations of an appropriate standard for academic work?
5. Are there significant differences among students in the incidence of self-reported dishonesty when categorized by class standing, college, grade point average, sex, or place of residence?
6. Is there a significant relationship between a student's perception of what constitutes a violation of an appropriate standard for academic work and dishonesty self-reported?
7. Do the conditions which students believe existed when they engaged in acts of dishonesty differ by the specific type of behavior in which they engaged?
8. Is there a significant relationship between the self-reporting of dishonesty by students and their reporting of dishonesty by others?
9. Do faculty differ in the actions which they take when a specific type of dishonesty is observed or discovered?

A questionnaire was developed by the researcher to gather data for the study. The instrument consisted of two parts. The first part

was designed to assess how students and faculty perceive selected behaviors in terms of what they personally believe is an appropriate standard for academic work. The selection of behaviors to test perceptions was based primarily on the researcher's experiences in working with students and faculty at Michigan State University. An attempt was made to include behaviors about which students and faculty had raised questions or expressed concern. Subjects were asked to rate the behaviors on a six-point scale. The response options provided were:

1 = No violation

2 = Minor violation

3 = Somewhat serious violation

4 = Serious violation

5 = Very serious violation

6 = Undecided

No weight was given to the "undecided" option and mean scores were based on the responses to options 1 through 5.

A test for reliability on Part I of the questionnaire which sought to measure perceptions of behaviors resulted in alpha levels of .92766 for undergraduates, .93914 for graduates, and .90345 for faculty. Because of the high correlations which were found to be consistent among all three groups under study, the 33 behaviors which were used to measure perceptions were treated as a single scale. Analysis of variance tests also were made on individual items to determine the specific behaviors on which there were significant differences.

Part II of the questionnaire for students asked subjects to report whether they had observed, or personally engaged in, any of 10 behaviors which the researcher categorized as dishonest, based on an interpretation of current university standards regarding honesty. The options for response for self-reporting and reporting of others were 0 through +5. In tabulations of dishonesty the option of +5 was treated as 6. If students reported that they had personally engaged in a behavior, they were then asked to select from a key any of the conditions listed which they believed existed at the time the behavior occurred. The conditions listed could be considered as negative, positive, or neutral. Students also were invited to comment on the conditions or to list other conditions which they believed existed at the time the behavior occurred.

Part II of the questionnaire for faculty asked subjects to report whether they had observed or discovered any of the 10 behaviors in their contacts with students. The 10 behaviors were the same 10 behaviors used in Part II of the student questionnaire. The response options for faculty observations were 0 through +3. In tabulations +3 was treated as 4. If faculty reported that they had observed or discovered a behavior, they were then asked to indicate what action was taken by selecting from seven options. The options ranged in seriousness from "no action" to "referral for University disciplinary action." An option of "other" was also included but not used in calculating mean scores.

The time period for the reporting of dishonesty was the academic year 1977-78 for both students and faculty.

The sample selected for the study consisted of 1,529 students and 150 faculty from the colleges of Business, Natural Science, and Social Science. Subjects were selected from these colleges because of the diversity in programs offered within the colleges. These three colleges also have the largest student enrollments of all colleges at Michigan State University.

Questionnaires were distributed through either personal delivery to residences and offices or through the U.S. Postal Service. All questionnaires were to be returned through the U.S. Postal Service. The return of student questionnaires was approximately 49 percent of which 740 provided data for analysis. The return of faculty questionnaires was approximately 47 percent of which 66 questionnaires were used in the analysis.

The data were analyzed using the SPSS Package and processed on the Michigan State University CDC 6500 computer. One-way analysis of variance programs were used primarily to test the hypotheses stated, and the Scheffé post hoc technique was employed to investigate differences where significance was found.

Findings and Discussion

Findings of the study are summarized and discussed within the framework of the following four categories:

1. Perceptions of behaviors appropriate for academic work;
2. Dishonesty reported;
3. Conditions cited by students when dishonesty occurred; and
4. Actions taken by faculty when dishonesty was discovered.

Perceptions of Behaviors Appropriate for Academic Work

Significant differences were found between faculty and students, both undergraduates and graduates, in the seriousness with which they perceived behaviors as measured by the overall scale. Faculty were found to perceive the behaviors more seriously than students. No significant difference was found between undergraduates and graduates, nor were significant differences found among faculty when categorized by years of teaching experience or college.

In examining differences in perceptions on individual behaviors, it was found that on 10 of the 33 items the mean scores for faculty were significantly higher than for undergraduates, and on seven of 33 items the faculty mean scores were significantly higher than the mean scores for graduates. Although no significant difference was found between undergraduates and graduates using the overall scale, on nine individual behaviors the mean score for graduates was significantly higher than the mean score for undergraduates.

On the following three behaviors the mean score for undergraduates was significantly higher than for faculty: (1) "reviewing frat file prior to exam," (2) "purposefully failing to do part on joint project" and (3) "having a beer with the instructor in hopes of getting a better grade." These behaviors may have been rated more seriously by students because situations of unfair advantage could have resulted for other students; for the behaviors rated more seriously by faculty, the integrity of the evaluation process itself appeared to be at issue.

In examining the nature of the behaviors which undergraduates viewed most seriously, and those they viewed the least seriously, it was noted that behaviors from which an individual derived self-benefit, and which also resulted in direct harm to another, were rated the most serious. Furthermore, two or more individuals were usually involved in these behaviors, whereas on those behaviors which were seen as least serious, individuals acted independently and direct self-benefit was not necessarily derived, nor did direct harm to another result.

When the responses on the overall scale were examined to determine if there were significant differences among undergraduates when categorized by sex, class, college, and GPA, the analysis revealed that women perceived the behaviors more seriously than men. Significant differences were also found by class, college, and GPA. Although post hoc comparisons for differences among classes failed to reach significant levels, the greatest difference in mean scores was observed to be between sophomores and seniors, with the mean for seniors generally higher than for the other three classes.

Students in Natural Science were found to rate behaviors significantly more seriously than students in the College of Business. Although students in Natural Science also rated behaviors more seriously than students in the College of Social Science, the post hoc comparisons between students in these two colleges did not show significance.

Those undergraudates with grade points between 3.26 and 3.75 rated the behaviors as significantly more serious than did students

with GPA's between 2.01 and 2.50. It was interesting to note that while students with relatively low GPA's saw the behaviors as less serious, the perception of students with the lowest GPA's used in the analysis (1.76-2.00), did not differ greatly from the perceptions of students with the highest GPA's (3.75-4.00).

On the overall scale, significant differences were found among graduate students in perception when categorized by sex, but not when categorized by college or GPA. Graduate women viewed the behaviors more seriously than graduate men. Considerable agreement was found among undergraduate women and graduate women on the specific behaviors which they rated to be significantly more serious than their male peers.

In the examination of differences among undergraduates by individual behaviors, it was found that the rating by undergraduate women was significantly higher than undergraduate men on seven of 33 behaviors. Seniors rated two behaviors as significantly more serious than other undergraduates, and on one additional behavior seniors perceived the behavior to be significantly more serious than freshmen and sophomores. On three behaviors the ratings by students in the College of Natural Science were significantly higher than the ratings by students in the College of Business.

On individual behaviors, as well as on the overall scale, it was found that those students with the higher GPA's perceived the behaviors more seriously than those with lower GPA's.

The reader is reminded that a level of .005 was established for testing significance on individual behaviors and, while significant differences were found on certain behaviors, no systematic effort was made to examine the nature of the behaviors where significant differences were found. Such an investigation was seen to be beyond the scope of this study; however, further examination of why significant differences were found on some behaviors and not others might prove to be of interest.

In comparing the seriousness with which behaviors were ranked by undergraduates, graduates, and faculty, it was noted that there was considerable agreement among the three groups with regard to the behaviors which they perceived to be the most serious and those they perceived to be least serious. The greatest discrepancy in the rank order appears to be within the middle of the range. The relative positions in ranks suggests that differences among the groups may be more in degree than direction. The analysis of variance tests on individual behaviors, however, revealed that there are some behaviors where students, rather than faculty, see the behavior to be more serious, thus indicating some differences in direction as well.

When the perceptions of those students who self-reported dishonesty were compared with those who did not, it was found that the former perceived the behaviors less seriously than the latter. This result supports the findings of such researchers as Sherrill, Salisbury, Horowitz, Friedman, and Knowlton and Hamerlynck who

found a positive correlation between attitudes toward cheating and actual behaviors. This finding also supports work done by Centra and others who have sought to indirectly study cheating behavior by studying attitudes toward cheating.

As noted previously, the level of significance found on this test (.0001), as well as on those tests that measured differences in perceptions between faculty and students, were well beyond the .05 level which was established.

Based on a general review of the findings relating to differences in perceptions, it can be concluded that faculty generally viewed most of the behaviors to be more serious than did students. This general conclusion is consistent with the findings of Frymier who used the Anderson instrument to measure attitudes toward cheating.

As was found by Anderson the attitudes of women toward dishonesty were found to be significantly more "strict" than the attitudes of men. This finding was true for both the undergraduate and graduate samples.

Students in the College of Natural Science rated behaviors most seriously, followed in order by those in Social Science and Business. Significant differences were found between students in Natural Science and Business.

Although it can be said generally that students with lower GPA's viewed the behaviors less seriously than those with the higher GPA's, the relationship was not perfectly linear in direction.

No significant differences were found in perceptions between preprofessional students and those not enrolled in preprofessional programs.

It would generally appear that the concern for honesty increases with the years of experience an individual has in higher education. The progression in seriousness of concern is from underclassmen, to upperclassmen to graduate students, with faculty perceiving the selected behaviors as most serious.

Dishonesty Reported

The number of dishonest behaviors self-reported by students within the period of one academic year was 2,020. Sixty-four percent of the undergraduates and 27 percent of the graduate students reported engaging in one or more of the behaviors categorized as dishonest during the year.

It is difficult to compare these percentages with those reported in other studies because of differences in reporting periods and data collection procedures. As reported previously, in the comprehensive study done by Bowers in 1964, it was found that about half of the students self-reported dishonesty since enrolling in college. Whether the incidence reported in this study is different than what might be found at other institutions, or whether the percentage of those who engage in dishonesty has increased across institutions since Bowers conducted his study, is not known.

The results of this study do, however, clearly support the position that dishonesty is not an isolated phenomenon. For the faculty members who commented on the questionnaire that the time period for reporting should not have been limited to one year because dishonesty was so rare, the figures reported in this study may be surprising; however, on the basis of previous studies the writer does not find the results unexpected.

The writer finds it difficult to interpret the incidence of dishonesty reported by other students. The reader is cautioned against assuming that there were 7,432 individual acts of dishonesty reported by others since a number of students undoubtedly had direct knowledge of the same incidents. Comments by students on the questionnaires suggest that when dishonesty occurs it is fairly widely known among other students. The results of this study also show that those who self-report dishonesty report significantly greater numbers of cases of dishonesty among other students. Whether this finding suggests that those who engage in dishonesty tend to associate more with others who do the same, or whether they are just more observant of what is happening around them, is not known. Several students who did not self-report dishonesty indicated that they were so busy trying to do their own work that they did not have time to be concerned about what others were doing.

"Copying" and "letting others copy" were among the most frequently reported dishonest behaviors, regardless of whether the reporting was done by other students, faculty, or self-reported.

In self-reported dishonesty these two behaviors combined accounted for almost half (895) of all dishonesty reported. Next in frequency was "submitted work without giving proper credit," followed by "used 'crib sheets.'" The least frequently self-reported behavior was "took exam/course for another student" (26). It was interesting to note, however, that 112 incidents of "having another student take exam/course" were reported.

Thirty-six of 66 faculty members reported having observed or discovered dishonesty in their classes during the year. One hundred seventy-one incidents of dishonesty were reported by faculty. In addition to observations of copying, "submitting work without giving proper credit" was the most frequently reported behavior.

The examination of differences among undergraduates in the incidence of dishonesty self-reported revealed significant differences by sex, class, college, and GPA on at least one behavior classified as dishonest.

On all ten behaviors the mean scores were higher for men than women; however, a significant difference was found by sex only on the behavior "changed answers or altered evaluation."

Sophomores had the highest mean scores on six of the ten behaviors. There was a significant difference between sophomores and freshmen on the behavior "let another student submit their work for credit."

Students in the College of Business had a significantly higher mean score on the behavior "used 'crib sheets' during exam"

than did students in Natural Science. On five other behaviors the mean score for Business students was higher than for those students in either Natural Science or Social Science.

Where significant differences were found by GPA the groups with the lower GPA's had the highest mean scores thus indicating a higher incidence of dishonesty.

No significant differences were found between preprofessional and nonpreprofessional students in the incidence of self-reported dishonesty; however, on seven of the ten behaviors the mean scores for the preprofessional students were higher.

When the incidence of self-reported dishonesty was examined for graduate students, no significant differences were found by sex or college. On one behavior a significant difference was found by GPA; however, the Scheffé post hoc procedure failed to identify where there were differences among groups.

Conditions Cited by Students When Dishonesty Occurred

This area of study, although not intended to receive primary emphasis, may serve to be the most useful to those concerned with promoting and protecting honesty in academic work.

Students who self-reported acts of dishonesty were asked to indicate which of the following conditions they believed existed at the time the behavior occurred.

1. Course interesting,
2. Little chance of discovery,

3. Test/assignment difficult,
4. Behavior not different than others',
5. Honesty stressed by instructor,
6. Competition keen,
7. I was unprepared,
8. Test/assignment meaningless,
9. Instructor reasonable and fair, and/or
10. Needed better grade than could earn.

Students were also invited to elaborate on the conditions which they selected or to list other conditions which they felt were present. Although a thorough analysis of student comments was not made, the condition not cited on the key that was most frequently mentioned by students was that "a friend needed help" (79).

Of the 10 conditions listed, "little chance of discovery" was by far the condition most frequently mentioned. This condition was cited by almost half of all students who engaged in any of the behaviors categorized as dishonest. The condition least frequently cited was "honesty was stressed by the instructor."

As was reported previously, "copying" and "letting someone copy during exam" were the dishonest behaviors most frequently reported. On a behavior such as copying, the question can be asked as to whether the incidence could be reduced if students did not believe there was little chance of their behavior being discovered. It is recognized by the writer that many faculty might not consider it either appropriate or necessary to attempt to control dishonesty

through such procedures as random seating or alternate test forms; however, such control measures might serve to minimize the copying which occurs. Copying, as reported previously, is a behavior which is seen by students and faculty as moderately serious in nature.

Another behavior for which "little chance of discovery" was frequently cited was "submitted work without giving proper credit." Comments on the students' questionnaire reinforced the position that many students do not believe that faculty check to see whether work has been properly credited. Based on the responses of both students and faculty to items in Part I of the questionnaire which relate to the crediting of sources, it may be that this type of behavior is not seen to be sufficiently serious to attempt to take measures to reduce its occurrence.

The fact that so few students indicated that "honesty was stressed by the instructor" raises some question about the extent to which the standards for honesty, as set forth by the University in the policy on the integrity of scholarship and grades, are communicated, interpreted, and reinforced by faculty in their contacts with students. Again, faculty may assume that this is neither necessary nor appropriate, yet there is some indication from students by their comments that there is confusion regarding expectations. The extent to which it is appropriate to "share" efforts with other students in the preparation of work to be submitted is one area about which there seems to be some confusion. There is also an indication that some students do not clearly understand what constitutes plagiarism.

According to the University statement on the integrity of scholarship and grades, the expectation is set forth that both students and faculty will honor the principles of truth and honesty. While faculty are charged with the responsibility to "exercise care in the planning and supervision of academic work so that honest effort will be positively encouraged," it is apparent that students also share in this responsibility.

Based on general comments made by students, there may be greater concern for behaviors which harm other students than there is for behaviors which violate "the system." If a behavior adversely affects the individual or his peer group, a student may act on his concern for the behavior, perhaps not because it is believed that a principle has been violated but, rather, because it is believed that individuals have been violated. Such a statement, however, surely does not reflect the comments of all students since several indicated that they believed that cheating was wrong in and of itself and that it was easier to live with a bad grade than one's conscience. While students may state this standard for themselves, they often expressed reluctance to attempt to impose such a standard on others, although their general comments reflect a concern for the extent of dishonesty which takes place.

The previous discussion has focused on the conditions which were the most often, and least often, cited by students as being present when dishonesty occurred. In examining the other conditions it can be noted that conditions which might be perceived by students

as adverse or negative, such as "test/assignment meaningless or difficult" and "competition keen," were more frequently mentioned than conditions such as "course interesting" and "instructor reasonable and fair," which may be categorized more as nonthreatening or positive in nature. These observations are not inconsistent with findings reported by such researchers as Johnson, Kirts, Kores, and Steininger who examined the nature of situations in which students said they would cheat or in which they felt cheating would be justified.

The two conditions which reflected on the status of the individual, "I was unprepared" and "I thought I needed a better grade than I could earn," were conditions frequently cited. This suggests that, at least for some students, the condition was attributed to self rather than to the environment.

Actions Taken by Faculty When Dishonesty Was Observed

Thirty-six faculty reported 171 incidents of dishonesty for the 1977-78 academic year. The number of responses from faculty regarding the actions which they took was 130. A "warning" was the most frequent action taken (42), followed by a "penalty/failing grade" on the assignment (37). In 24 situations the instructors took "no action." On only three occasions were students "referred for University disciplinary action in lieu of, or in addition to, a failing grade."

The three behaviors on which the most serious actions were taken were "changed answers or altered evaluation," "submitted

paper/project, not own work," and "exchanged information during exam." As should be noted, on behaviors where students "took exam/course for another" or "had another take exam/course" there were so few observations reported (3) that it was difficult to draw any meaningful inference from the report of actions taken on those behaviors. Because of the limitation in number on actions taken for all behaviors, the reader is cautioned against drawing conclusions beyond the data reported.

As indicated previously, several instructors commented that they believed it was often difficult and unproductive to attempt to substantiate a charge of dishonesty. The actions, or lack of actions, which instructors reported may reflect a reluctance to take action, or more serious action, because of what may be required of them if a student raises a challenge.

An examination of the differences in actions which faculty take when a particular behavior is observed or discovered reveals significant variances on five behaviors. On two behaviors, "changed answers or altered evaluation" and "submitted paper/project not own work," actions reported ranged from "no action" to "referred for University disciplinary action"; however, the option to refer a student for what might result in more than a penalty grade on an assignment or in a course was rarely exercised.

It should be remembered in reviewing the action taken that the variance noted may, in part, be due to differences in the circumstances surrounding the incident as well as differences among

faculty regarding the actions which they personally may feel are appropriate for a given type of violation.

Conclusions and Implications

Based on the findings which have been reported, there are a few general conclusions which appropriately may be drawn. Some possible implications of these conclusions are also set forth.

1. In general, faculty were found to be more "strict" in categorizing behaviors as dishonest than were students. They also viewed behaviors more seriously than did students, both graduates or undergraduates. It was found, however, that undergraduate students perceived certain behaviors as more serious than faculty. The differences between groups, however, appeared to be greater in degree than in direction. The degree of seriousness with which the behaviors were viewed generally appeared to be related to years of experience in higher education, with an increase in concern expressed from underclassmen to upperclassmen and from graduates to faculty.

The differences which were noted in the perceived seriousness of behaviors between students and faculty suggests that unless expectations for honesty in academic work are clarified and communicated, students may, realistically, not understand the standards by which their behavior may be evaluated.

2. Significant differences among students in the seriousness with which they perceived behaviors was found between those who self-reported dishonesty and those who did not. Those who did not

self-report dishonesty were found to view behaviors more seriously than those who did. They also reported less dishonesty among other students.

Because of the positive relationship found between attitudes and behaviors, further effort to determine if, and perhaps how, attitudes might be influenced appears important. The writer recognizes, however, that extensive research has already been done in this area. Investigation into why students who self-report dishonesty also report more dishonesty among other students is another area which warrants further study.

3. Women students, both undergraduates and graduates, viewed behaviors more seriously than their male peers. Although they expressed greater concern about behaviors, the incidence of dishonesty among women is not appreciably different than among men.

Based on this finding, a question could be raised regarding the possible personal dissonance that this discrepancy between attitude and action might evoke. The extent to which competition among students furthers actions which do not appear to be consistent with attitudes expressed, is also an area which may warrant further investigation.

4. Dishonesty is not an isolated phenomenon nor is it confined to any particular group of students. Although dishonesty was found to be more prevalent among undergraduates than graduates, other differences as found by such variables as sex, class, college, or GPA, while in some instances were found to be significant, may lack meaning in any overall practical sense.

To assume that dishonesty will not, or does not, occur because of the nature of the student population involved may be erroneous. Those who make such an assumption may well find themselves with behaviors unexpected.

5. Students who engage in dishonesty most often believe that there is little chance their behavior will be discovered.

In view of the relatively few cases of dishonesty reported by the faculty, students may be accurate in this position. It would appear that there is a great deal of dishonesty which occurs about which other students are aware but which does not come to the attention of instructors. Because of the high percentage of students who indicated that they believed there was little chance of their behavior being discovered, the question can be raised as to whether further consideration should not be given to developing procedures which might serve to discourage dishonesty and to assist in the identification of those who become involved in dishonest behaviors.

6. Faculty do not place a great deal of emphasis on honesty in their contacts with students. This conclusion is based only on the fact that very few students who engaged in dishonesty indicated that "honesty was stressed by the instructor."

A possible implication of this conclusion is that if faculty do not communicate, interpret, and reinforce the standards set forth for honesty by the University community, those standards may have little meaning for, or influence with, members of the student population.

7. The actions which faculty take vary considerably for the same type of dishonest behavior.

While this variation in sanctions may be appropriate, given the circumstance of a situation, the range in sanctions taken could serve to confuse students regarding the potential consequence of a violation. Questions also might be raised regarding the extent to which there is an equal application of standards.

Recommendations for Further Research

1. A more extensive survey of faculty to determine their exposure to, and experience in, working with student dishonesty is recommended. The faculty sample in this study was relatively small and the information requested was not extensive enough to gain adequate understanding of the nature of concerns which faculty may have.

2. Why certain behaviors are perceived by students and faculty to be more serious than others needs further examination.

3. Based on the relative seriousness with which behaviors were perceived, it might be productive to survey both students and faculty to determine what type of sanctions, if any, they believe are appropriate for different types of behaviors.

4. The conditions which students believe exist when dishonesty occurs should be examined further in order to see if there are factors within the environment of classrooms which might be altered to promote and protect honesty. Based on the results of this study it is also recommended that there be a further study into the possible relationship

between dishonest behaviors and the students' belief that there is little chance their dishonesty would be discovered. It would also be interesting to examine whether dishonesty would be minimized if there were a greater emphasis on honesty by instructors than was indicated by the results of this study.

APPENDICES

APPENDIX A

STUDENT QUESTIONNAIRE

QUESTIONNAIRE REGARDING ACADEMIC DISHONESTY

MICHIGAN STATE UNIVERSITY 1978

BACKGROUND INFORMATION - Please circle the number following the appropriate response:

1. Class Standing:

   Freshman - - - 1
   Sophomore - - - 2
   Junior - - - - 3
   Senior - - - - 4
   Graduate - - - 5

2. College :

   Business - - - - - - 1
   Natural Science - - 2
   Social Science - - - 3

3. Grade Point Average:

   (Overall for undergraduate or graduate work)

   Less than 1.75 - - - 1
   1.76-2.00 - - - - - 2
   2.01-2.25 - - - - - 3
   2.26-2.50 - - - - - 4
   2.51-2.75 - - - - - 5
   2.76-3.00 - - - 6
   3.01-3.25 - - - 7
   3.26-3.50 - - - 8
   3.51-3.75 - - - 9
   3.76-4.00 - - -10

4. If undergraduate, are you enrolled in a pre-professional program?

   Yes - - - 1 No - - - 2

5. Total number of classes (not credits) in which you have been enrolled this academic year (Fall, Winter, Spring)

   1-3 - - - 1
   4-6 - - - 2
   7-9 - - - 3
   10-12 - - - - - - 4
   13-15 - - - - - - 5
   More than 15 - - - 6

6. Place of Residence:

   On-campus residence hall - - - - - - 1
   On-campus apartment unit - - - - - - 2
   Fraternity or sorority house - - - - 3
   Off-campus apartment, room or house - 4

7. Sex:

   Female - - - 1 Male - - - 2

PART I - For each of the following situations please indicate how you perceive the behavior of the student identified as X. Your response should be based on what you personally believe is an appropriate standard of behavior in relationship to academic work. Before you respond, read through the first few items to get a sense of the different situations. Select your response from the following key and circle the appropriate number:

Key

1. No violation
2. Minor violation
3. Somewhat serious violation
4. Serious violation
5. Very serious violation
6. Undecided

Circle appropriate number--remember you are responding to the behavior of X:

	N	M	SS	S	VS	U
8. During a proctored exam X let a friend copy from her answer sheet when she realized the friend was having difficulty with the test.....	1	2	3	4	5	6
9. X's twin sister offered to take an entire course for her. X agreed and received credit for the course which she never attended.....	1	2	3	4	5	6
10. X submitted a paper for which she had received credit in one course for evaluation in another, changing only the title page.....	1	2	3	4	5	6
11. X reviewed the fraternity test file the night before the final exam. He knew the file included exams which were not available to classmates for study.....	1	2	3	4	5	6

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		N	M	SS	S	VS	U
12.	X's girlfriend was secretary for his instructor. X persuaded his girlfriend to change 2 grade entries in the instructor's grade book--raising his and lowering one for a classmate he didn't like...	1	2	3	4	5	6
13.	During an exam X was nudged by a neighbor for help. X intentionally gave him the wrong answers.....	1	2	3	4	5	6
14.	X had his doctor, a family friend, write a statement that he had missed a mid-term because of illness when in fact he was unprepared. He was given a make-up exam.....	1	2	3	4	5	6
15.	The instructor was giving the same exam to two sections of his class. X's roommate was enrolled in the first section, X in the second. Following the first exam X met her roommate who gave her information regarding the test questions.....	1	2	3	4	5	6
16.	X found the briefcase of one of her instructors on a campus bus. Before returning it she copied the draft of her upcoming mid-term exam.....	1	2	3	4	5	6
17.	In a proctored exam, X was having difficulty with formulas and looked at the exams of students next to him for help.....	1	2	3	4	5	6
18.	A teaching assistant offered X a B on a term paper in exchange for two season football tickets. X accepted.....	1	2	3	4	5	6
19.	On an application for admission, candidates were required to list all previous college work. X did not do so because her prior record was poor and she was afraid of being denied admission.....	1	2	3	4	5	6
20.	When X saw the instructor was busy with another student after the exam, she took the test booklet to include in her "house file.".....	1	2	3	4	5	6
21.	The class had been encouraged to study together throughout the term; however, they were instructed to do their own work on the take-home final. X was asked by a classmate to critique his final before handing it in. X agreed and offered several suggestions.....	1	2	3	4	5	6
22.	X worked for a commercial term paper company and offered to pay $50 to classmates for A papers to be included in the company's files. Several students accepted the offer.....	1	2	3	4	5	6
23.	In a lab X gave a classmate the wrong formula with the intent of keeping her from successfully completing her experiment.....	1	2	3	4	5	6
24.	In class when students were told they could correct their own exams, X changed three answers to improve his score.....	1	2	3	4	5	6
25.	X did not put quotation marks around sentences which she copied verbatim from a research article although she gave recognition to the author in a footnote.....	1	2	3	4	5	6
26.	X and a friend worked out a code whereby X could signal answers to true/false questions. The friend received the needed help.....	1	2	3	4	5	6

Page 3

		N	M	SS	S	VS	U
27.	A friend of X is a student custodian in the computer lab. He found a "users card" (PNC) in the wastebasket and gave it to X. The card enabled X to complete a required project before his classmates because the card had a higher priority than those issued to the class.....	1	2	3	4	5	6
28.	X and a classmate were assigned by the instructor to work together on a design project with the understanding that they would both receive the grade assigned to the project. X purposefully failed to do his part but received an A.....	1	2	3	4	5	6
29.	X faked the page numbers in the footnotes to a paper since he could not locate his note cards.....	1	2	3	4	5	6
30.	Although students were instructed not to use calculators for their computation during an exam, X took a calculator from his pocket and computed 2 problems when the instructor was called out of the room..	1	2	3	4	5	6
31.	X took a mid-term exam for which she knew she was not well-prepared. After the exam, she falsely advised the instructor that the exam had been "out" in hopes that another exam would be given. The instructor gave the entire class a new exam.....	1	2	3	4	5	6
32.	X prepared a bluebook prior to an exam and substituted it for the one which was to have been completed during the exam period.....	1	2	3	4	5	6
33.	A fraternity officer advised X that he was expected to take an exam for a brother. X did so.....	1	2	3	4	5	6
34.	X volunteered to turn in a classmate's paper, but before doing so she exchanged title pages and submitted it as her own work.....	1	2	3	4	5	6
35.	X "lifted" from the library the only two copies of a reserve book which was required reading for a large class and put them in the house library for her sorority sisters.....	1	2	3	4	5	6
36.	Students were left on their honor to take an exam without receiving assistance. X referred to the text whenever she needed help.....	1	2	3	4	5	6
37.	In the mail X received a term paper from a commercial company which he had not ordered. He gave it to a friend to use in one of his classes.....	1	2	3	4	5	6
38.	X made a practice of having a beer with the instructor after class in hopes of getting a better grade.....	1	2	3	4	5	6
39.	On a lab report X did not accurately report his findings because he did not obtain the results he knew were expected.....	1	2	3	4	5	6
40.	X asked for, and received, special tutoring from one of her instructors in exchange for babysitting the instructor's two children.....	1	2	3	4	5	6

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PART II - Based on your experiences this past academic year you may have observed, or otherwise have first-hand knowledge, of some of the following behaviors having taken place. Under certain circumstances you may, yourself, have become involved. In order to understand the frequency of such behaviors and the conditions under which they occur, you are asked to consider each of the 3 items under the behaviors listed and respond, where appropriate. Remember your responses are being made anonymously. In addition to the following key, space is provided for you to respond by comment on other conditions and special circumstances which you believe applied.

Key to Conditions

1. The course was interesting
2. There was little chance of my behavior being discovered
3. The test/assignment was difficult
4. My behavior was not different from that of other students
5. Honesty was stressed by the instructor
6. Competition among classmates was keen
7. I was unprepared
8. The test/assignment seemed meaningless
9. The instructor was reasonable and fair
10. I thought I needed a better grade than I could earn

EXAMPLE

Situation: On three occasions I saw other students using "crib sheets." Once, after being out with the flu, I didn't have time to prepare for an upcoming exam in which I needed a B to get a C in the course. I liked the class, but knew the test section would be large with few proctors, so I gambled and took in a "cheat sheet."

Response Sample:

A. Student used "crib sheet" or other unauthorized self-aid during an examination.

41. Number of times I know of other students engaging in this behavior..... 0 1 2 (3) 4 5 +5
42. Number of times I engaged in this behavior..... 0 (1) 2 3 4 5 +5
43. If you personally engaged in this behavior, read through the conditions in the key and circle those that you believe existed..... (1) (2) 3 4 5 6 (7) 8 9 (10)

Comment: *Had the flu--didn't think I had choice*

Circle appropriate number--remember you are reporting on your observations and experiences this past academic year:

A. Student used "crib sheets" or other unauthorized self-aid during an examination.

41. Number of times I know of other students engaging in this behavior..... 0 1 2 3 4 5 +5
42. Number of times I engaged in this behavior..... 0 1 2 3 4 5 +5
43. If you personally engaged in this behavior, read through the key and circle the conditions you believe existed.... 1 2 3 4 5 6 7 8 9 10

Comment: _____

Page 5

Key to Conditions

1. The course was interesting
2. There was little chance of my behavior being discovered
3. The test/assignment was difficult
4. My behavior was not different from that of other students
5. Honesty was stressed by the instructor
6. Competition among classmates was keen
7. I was unprepared
8. The test/assignment seemed meaningless
9. The instructor was reasonable and fair
10. I thought I needed a better grade than I could earn

B. Student copied from another student during an examination.

44. Number of times I know of other students engaging in this behavior..... 0 1 2 3 4 5 +5
45. Number of times I engaged in this behavior..... 0 1 2 3 4 5 +5
46. If you personally engaged in this behavior, read through the key and circle the conditions you believe existed..... 1 2 3 4 5 6 7 8 9 10

Comment: _____

C. Student submitted paper/project without giving appropriate credit to sources.

47. Number of times I know of other students engaging in this behavior..... 0 1 2 3 4 5 +5
48. Number of times I engaged in this behavior..... 0 1 2 3 4 5 +5
49. If you personally engaged in this behavior, read through the key and circle the conditions you believe existed..... 1 2 3 4 5 6 7 8 9 10

Comment: _____

D. Student took an exam or entire course for another student.

50. Number of times I know of other students engaging in this behavior..... 0 1 2 3 4 5 +5
51. Number of times I engaged in this behavior..... 0 1 2 3 4 5 +5
52. If you personally engaged in this behavior, read through the key and circle the conditions you believe existed..... 1 2 3 4 5 6 7 8 9 10

Comment: _____

E. Student allowed another student to copy from his/her work during an examination.

53. Number of times I know of other students engaging in this behavior..... 0 1 2 3 4 5 +5
54. Number of times I engaged in this behavior..... 0 1 2 3 4 5 +5
55. If you personally engaged in this behavior, read through the key and circle the conditions you believe existed..... 1 2 3 4 5 6 7 8 9 10

Comment: _____

F. Student had another student take an examination or entire course for him/her.

56. Number of times I know of other students engaging in this behavior..... 0 1 2 3 4 5 +5
57. Number of times I engaged in this behavior..... 0 1 2 3 4 5 +5
58. If you personally engaged in this behavior, read through the key and circle the conditions you believe existed..... 1 2 3 4 5 6 7 8 9 10

Comment: _____

Key to Conditions

1. The course was interesting
2. There was little chance of my behavior being discovered
3. The test/assignment was difficult
4. My behavior was not different from that of other students
5. Honesty was stressed by the instructor
6. Competition among classmates was keen
7. I was unprepared
8. The test/assignment seemed meaningless
9. The instructor was reasonable and fair
10. I thought I needed a better grade than I could earn

G. Student changed answers or altered the instructor's evaluation following an examination.

59. Number of times I know of other students engaging in this behavior..... 0 1 2 3 4 5 +5
60. Number of times I engaged in this behavior..... 0 1 2 3 4 5 +5
61. If you personally engaged in this behavior, read through the key and circle the conditions you believe existed..... 1 2 3 4 5 6 7 8 9 10

Comment: _____

H. Student submitted a paper/project which was not his/her own work.

62. Number of times I know of other students engaging in this behavior..... 0 1 2 3 4 5 +5
63. Number of times I engaged in this behavior..... 0 1 2 3 4 5 +5
64. If you personally engaged in this behavior, read through the key and circle the conditions you believe existed..... 1 2 3 4 5 6 7 8 9 10

Comment: _____

I. Student, through a system worked out in advance, exchanged information during an examination with another student.

65. Number of times I know of other students engaging in this behavior..... 0 1 2 3 4 5 +5
66. Number of times I engaged in this behavior..... 0 1 2 3 4 5 +5
67. If you personally engaged in this behavior, read through the key and circle the conditions you believe existed..... 1 2 3 4 5 6 7 8 9 10

Comment: _____

J. Student let his/her work be submitted by another student for credit.

68. Number of times I know of other students engaging in this behavior..... 0 1 2 3 4 5 +5
69. Number of times I engaged in this behavior..... 0 1 2 3 4 5 +5
70. If you personally engaged in this behavior, read through the key and circle the conditions you believe existed..... 1 2 3 4 5 6 7 8 9 10

Comment: _____

THANK YOU--PLEASE RETURN BY MAY 24

APPENDIX B

FACULTY QUESTIONNAIRE

QUESTIONNAIRE REGARDING ACADEMIC DISHONESTY

MICHIGAN STATE UNIVERSITY 1978

BACKGROUND INFORMATION - Please circle the number following the appropriate response:

1. College:

   Business - - - 1 Natural Science - - - 2 Social Science - - - 3

2. Classes taught this academic year:
   Any separate entry in the Schedule of Courses is considered a class (section or course). Please include all classes for which you were/are responsible for the grading of the students enrolled. By class size, indicate the number of classes taught each term.

FALL		WINTER		SPRING	
Class size:	No.of classes	Class size:	No.of classes	Class size:	No.of classes
Less than 40	0 1 2 3 +3	Less than 40	0 1 2 3 +3	Less than 40	0 1 2 3 +3
41-80	0 1 2 3 +3	41-80	0 1 2 3 +3	41-80	0 1 2 3 +3
81-120	0 1 2 3 +3	81-120	0 1 2 3 +3	81-120	0 1 2 3 +3
121-160	0 1 2 3 +3	121-160	0 1 2 3 +3	121-160	0 1 2 3 +3
More than 160	0 1 2 3 +3	More than 160	0 1 2 3 +3	More than 160	0 1 2 3 +3

3. Number of years of college or university teaching experience:

   Less than 4 - - - 1 4-8 - - - - - - - 2 9-13 - - - 3
   14-18 - - - - - - 4 More than 18 - - - 5

4. Sex:

   Female - - - 1 Male - - - 2

PART I - For each of the following situations please indicate how you perceive the behavior of the student identified as X. Your response should be based on what you personally believe is an appropriate standard of behavior in relationship to academic work. Before you respond, read through the first few items to get a sense of the different situations. Select your response from the following key and circle the appropriate number:

Key

1. No violation
2. Minor violation
3. Somewhat serious violation
4. Serious violation
5. Very serious violation
6. Undecided

Circle appropriate number--remember you are responding to the behavior of X:

	N	M	SS	S	VS	U
5. During a proctored exam X let a friend copy from her answer sheet when she realized the friend was having difficulty with the test.....	1	2	3	4	5	6
6. X's twin sister offered to take an entire course for her. X agreed and received credit for the course which she never attended.....	1	2	3	4	5	6
7. X submitted a paper for which she had received credit in one course for evaluation in another, changing only the title page.....	1	2	3	4	5	6
8. X reviewed the fraternity test file the night before the final exam. He knew the file included exams which were not available to classmates for study.....	1	2	3	4	5	6

Page 2

		N	M	SS	S	VS	U
9.	X's girlfriend was secretary for his instructor. X persuaded his girlfriend to change 2 grade entries in the instructor's grade book--raising his and lowering one for a classmate he didn't like...	1	2	3	4	5	6
10.	During an exam X was nudged by a neighbor for help. X intentionally gave him the wrong answers.....	1	2	3	4	5	6
11.	X had his doctor, a family friend, write a statement that he had missed a mid-term because of illness when in fact he was unprepared. He was given a make-up exam.....	1	2	3	4	5	6
12.	The instructor was giving the same exam to two sections of his class. X's roommate was enrolled in the first section, X in the second. Following the first exam X met her roommate who gave her information regarding the test questions.....	1	2	3	4	5	6
13.	X found the briefcase of one of her instructors on a campus bus. Before returning it she copied the draft of her upcoming mid-term exam.....	1	2	3	4	5	6
14.	In a proctored exam, X was having difficulty with formulas and looked at the exams of students next to him for help.....	1	2	3	4	5	6
15.	A teaching assistant offered X a B on a term paper in exchange for two season football tickets. X accepted.....	1	2	3	4	5	6
16.	On an application for admission, candidates were required to list all previous college work. X did not do so because her prior record was poor and she was afraid of being denied admission.....	1	2	3	4	5	6
17.	When X saw the instructor was busy with another student after the exam, she took the test booklet to include in her "house file.".....	1	2	3	4	5	6
18.	The class had been encouraged to study together throughout the term; however, they were instructed to do their own work on the take-home final. X was asked by a classmate to critique his final before handing it in. X agreed and offered several suggestions.....	1	2	3	4	5	6
19.	X worked for a commercial term paper company and offered to pay $50 to classmates for A papers to be included in the company's files. Several students accepted the offer.....	1	2	3	4	5	6
20.	In a lab X gave a classmate the wrong formula with the intent of keeping her from successfully completing her experiment.....	1	2	3	4	5	6
21.	In class when students were told they could correct their own exams, X changed three answers to improve his score.....	1	2	3	4	5	6
22.	X did not put quotation marks around sentences which she copied verbatim from a research article although she gave recognition to the author in a footnote.....	1	2	3	4	5	6
23.	X and a friend worked out a code whereby X could signal answers to true/false questions. The friend received the needed help.....	1	2	3	4	5	6

		N	M	SS	S	VS	U
24.	A friend of X is a student custodian in the computer lab. He found a "users card" (PNC) in the wastebasket and gave it to X. The card enabled X to complete a required project before his classmates because the card had a higher priority than those issued to the class	1	2	3	4	5	6
25.	X and a classmate were assigned by the instructor to work together on a design project with the understanding that they would both receive the grade assigned to the project. X purposefully failed to do his part but received an A	1	2	3	4	5	6
26.	X faked the page numbers in the footnotes to a paper since he could not locate his note cards	1	2	3	4	5	6
27.	Although students were instructed not to use calculators for their computation during an exam, X took a calculator from his pocket and computed 2 problems when the instructor was called out of the room	1	2	3	4	5	6
28.	X took a mid-term exam for which she knew she was not well-prepared. After the exam, she falsely advised the instructor that the exam had been "out" in hopes that another exam would be given. The instructor gave the entire class a new exam	1	2	3	4	5	6
29.	X prepared a bluebook prior to an exam and substituted it for the one which was to have been completed during the exam period	1	2	3	4	5	6
30.	A fraternity officer advised X that he was expected to take an exam for a brother. X did so	1	2	3	4	5	6
31.	X volunteered to turn in a classmate's paper, but before doing so she exchanged title pages and submitted it as her own work	1	2	3	4	5	6
32.	X "lifted" from the library the only two copies of a reserve book which was required reading for a large class and put them in the house library for her sorority sisters	1	2	3	4	5	6
33.	Students were left on their honor to take an exam without receiving assistance. X referred to the text whenever she needed help	1	2	3	4	5	6
34.	In the mail X received a term paper from a commercial company which he had not ordered. He gave it to a friend to use in one of his classes	1	2	3	4	5	6
35.	X made a practice of having a beer with the instructor after class in hopes of getting a better grade	1	2	3	4	5	6
36.	On a lab report X did not accurately report his findings because he did not obtain the results he knew were expected	1	2	3	4	5	6
37.	X asked for, and received, special tutoring from one of her instructors in exchange for babysitting the instructor's two children	1	2	3	4	5	6

PART II - Listed below are 10 behaviors which you may have observed/discovered, or had reported to you by others. In order to gain information regarding the frequency with which faculty encounter these behaviors and the course of action which they pursue when such behaviors come to their attention, you are asked to indicate the number of times, if any, you encountered these behaviors in your classes during this academic year. If the behavior was encountered, please select from the following key the action taken in relationship to the student involved in each incident. Should your response be "other," specify in the comment section what the "other" action included. Your comments about why certain actions were, or were not, taken are invited.

Key to Actions

1. No action taken
2. Warning only (verbal or written)
3. Required to repeat assignment
4. Penalty grade or failing grade on assignment
5. Penalty grade or failing grade for course
6. Referred for University disciplinary action in lieu of or in addition to a failing grade
7. Other

Please circle appropriate number:

A. Student used "crib sheets" or other unauthorized self-aid during an examination.

44. Number of times I encountered this behavior..... 0 1 2 3 +3
45. Action taken in 1st incident..... 1 2 3 4 5 6 7
46. Action taken in 2nd incident..... 1 2 3 4 5 6 7
47. Action taken in 3rd incident..... 1 2 3 4 5 6 7

Comment:_____

B. Student copied from another student during an examination.

48. Number of times I encountered this behavior..... 0 1 2 3 +3
49. Action taken in 1st incident..... 1 2 3 4 5 6 7
50. Action taken in 2nd incident..... 1 2 3 4 5 6 7
51. Action taken in 3rd incident..... 1 2 3 4 5 6 7

Comment:_____

C. Student submitted paper/project without giving appropriate credit to sources.

52. Number of times I encountered this behavior..... 0 1 2 3 +3
53. Action taken in 1st incident..... 1 2 3 4 5 6 7
54. Action taken in 2nd incident..... 1 2 3 4 5 6 7
55. Action taken in 3rd incident..... 1 2 3 4 5 6 7

Comment:_____

D. Student took an exam or entire course for another student.

56. Number of times I encountered this behavior..... 0 1 2 3 +3
57. Action taken in 1st incident..... 1 2 3 4 5 6 7
58. Action taken in 2nd incident..... 1 2 3 4 5 6 7
59. Action taken in 3rd incident..... 1 2 3 4 5 6 7

Comment:_____

Page 5

Key to Actions

1. No action taken
2. Warning only (verbal or written)
3. Required to repeat assignment
4. Penalty grade or failing grade on assignment
5. Penalty grade or failing grade for course
6. Referred for University disciplinary action in lieu of or in addition to a failing grade
7. Other

E. Student allowed another student to copy from his/her work during an examination.

60. Number of times I encountered this behavior..... 0 1 2 3 +3
61. Action taken in 1st incident..... 1 2 3 4 5 6 7
62. Action taken in 2nd incident..... 1 2 3 4 5 6 7
63. Action taken in 3rd incident..... 1 2 3 4 5 6 7

Comment: _____

F. Student had another student take an examination or entire course for him/her.

64. Number of times I encountered this behavior..... 0 1 2 3 +3
65. Action taken in 1st incident..... 1 2 3 4 5 6 7
66. Action taken in 2nd incident..... 1 2 3 4 5 6 7
67. Action taken in 3rd incident..... 1 2 3 4 5 6 7

Comment: _____

G. Student changed answers or altered the instructor's evaluation following an examination.

68. Number of times I encountered this behavior..... 0 1 2 3 +3
69. Action taken in 1st incident..... 1 2 3 4 5 6 7
70. Action taken in 2nd incident..... 1 2 3 4 5 6 7
71. Action taken in 3rd incident..... 1 2 3 4 5 6 7

Comment: _____

H. Student submitted a paper/project which was not his/her own work.

72. Number of times I encountered this behavior..... 0 1 2 3 +3
73. Action taken in 1st incident..... 1 2 3 4 5 6 7
74. Action taken in 2nd incident..... 1 2 3 4 5 6 7
75. Action taken in 3rd incident..... 1 2 3 4 5 6 7

Comment: _____

I. Student, through a system worked out in advance with another student, exchanged information during an examination.

76. Number of times I encountered this behavior..... 0 1 2 3 +3
77. Action taken in 1st incident..... 1 2 3 4 5 6 7
78. Action taken in 2nd incident..... 1 2 3 4 5 6 7
79. Action taken in 3rd incident..... 1 2 3 4 5 6 7

Comment: _____

J. Student allowed another student to submit his/her work for evaluation and credit.

80. Number of times I encountered this behavior..... 0 1 2 3 +3
81. Action taken in 1st incident..... 1 2 3 4 5 6 7
82. Action taken in 2nd incident..... 1 2 3 4 5 6 7
83. Action taken in 3rd incident..... 1 2 3 4 5 6 7

Comment: _____

THANK YOU -- PLEASE RETURN BY MAY 24

APPENDIX C

FIRST LETTER TO STUDENT SAMPLE

IMPORTANT

SURVEY ON ACADEMIC DISHONESTY

May 16, 1978

Dear MSU Student:

Both students and faculty have expressed concern about academic dishonesty on campus. In an effort to better understand how dishonesty is defined, how prevalent it is, and the conditions under which students believe it occurs, I am conducting a study in which both students and faculty are being asked to take a brief time, 15 or 20 minutes, to provide some much needed information.

Before end-of-the-term activities add to an already busy schedule, I would very much appreciate your taking time this week to complete the enclosed questionnaire. Please don't put it aside because it looks like it will take too long. Some of it may not apply to you and a few minutes may be all that is required for you to make an important contribution.

All responses are to be made anonymously. Do not include your name or student number. There is no way individuals can be personally identified with the information they supply, so please be candid and complete in responding!!!

For the study to be of any value, it is necessary that a high percentage of those who have been selected to participate do so. Your cooperation is very much needed and will be greatly appreciated!!

Thank you in advance for your time and attention to what I believe is an area of interest and importance to students and faculty alike. With your help, I hope the study can be completed and that it will prove to be of some value to members of the University community.

Sincerely,

Ruth E. Renaud
Graduate Student
Michigan State University

PLEASE RETURN BY MAY 24

APPENDIX D

SECOND LETTER TO STUDENT SAMPLE

SURVEY ON ACADEMIC DISHONESTY

May 22, 1978

Dear MSU Student:

If you have returned the questionnaire on academic dishonesty, my thanks! If not, would you do so as soon as possible? Because all responses are anonymous, I do not know who has responded and who has not, so this follow-up letter is being sent to all who were asked to participate.

I recognize that filling out a questionnaire on a topic that is not necessarily "popular" may seem like an unnecessary task at this time of year; however, information from the student population is very much needed. By taking 15 or 20 minutes of your time, you can help define, from a student's perspective, what constitutes dishonesty, how seriously certain behaviors are viewed by students, and what situations students have encountered this past year where dishonesty may have occurred.

If, for some reason, you choose not to complete the questionnaire, would you please take just a minute to fill in the background information requested, tell me why you are not responding, and mail the questionnaire back. All questionnaires should be completed before finals begin on June 5.

Sincerely,

Ruth E. Renaud
Graduate Student
Michigan State University

P.S. Should the rumored postal hike take effect, and the self-addressed stamped envelope be short on postage, I will pay any postage due when it is received.

APPENDIX E

FIRST LETTER TO FACULTY SAMPLE

SURVEY ON ACADEMIC DISHONESTY

May 16, 1978

Dear MSU Faculty Member:

Both students and faculty have expressed concern about academic dishonesty on campus. In an effort to address that concern, I am undertaking a study designed to explore four questions:

1) What behaviors do students and faculty believe constitute dishonesty and how seriously are these behaviors viewed?
2) How prevalent is dishonesty among students?
3) What conditions do students perceive to exist when dishonesty occurs?
4) What course of action do faculty follow when dishonesty is discovered?

A random sample of students and faculty from three colleges here at MSU has been selected for participation in the study. As a part of that sample, you are being asked to take 15 or 20 minutes to provide some much needed information by responding to the enclosed questionnaire. All responses are to be made anonymously. There is no way that information supplied by students or faculty can be identified with the individuals responding!

My own particular interest in this area is based on my experience as a staff member here working with students and faculty whom I believe are sincerely interested and concerned with this issue. My motivation to conduct the study at this time is a desire to complete my own graduate program. Although I am conducting the study as a graduate student, I sincerely hope that interests other than mine can be served by its completion.

A high rate of return of questionnaires is necessary for the study to be of any value. Your cooperation in taking a few minutes this week to complete the questionnaire, before the end-of-term activities add to an already busy schedule, will be greatly appreciated! I will be glad to share any results of the study with you and I invite your comments about the questionnaire specifically, or the topic in general. Please use the back of the questionnaire for any comments you may have.

My thanks in advance for your time and attention to what I believe is an area of interest and importance to members of the University community.

Sincerely,

Ruth E. Renaud

APPENDIX F

SECOND LETTER TO FACULTY SAMPLE

SURVEY ON ACADEMIC DISHONESTY

May 22, 1978

Dear MSU Faculty Member:

If you have returned the questionnaire on academic dishonesty, my thanks. If not, would you do so as soon as possible? Because all responses are anonymous, I do not know who has responded and who has not, so a follow-up is being sent to all who were asked to participate.

I recognize that I am asking faculty to take valuable time to fill out a questionnaire on a topic which is not necessarily "popular"; however, it is one which I believe is of importance to the academic community. Although the study is only exploratory in nature, I am hopeful that information can be secured that will be of value in beginning to examine a complex concern.

Your perspective is needed! Please take a few minutes, if you have not already done so, to complete and return the questionnaire. Because the reporting period for the observations and experiences of both students and faculty extends to, but does not include, final examination week spring term, you are asked to complete the questionnaire prior to June 5.

Thank you for your cooperation!

Sincerely,

Ruth E. Renaud

P.S. Should the rumored postal hike take effect, and the self-addressed stamped envelope be short on postage, I will pay any postage due when it is received.

SELECTED BIBLIOGRAPHY

SELECTED BIBLIOGRAPHY

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