

PEER INFLUENCE ON ATTITUDES AND BEHAVIOR
ALIEN TO INSTITUTIONAL OBJECTIVES

by

Wesley E. Wells

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SIGNED: Wesley D. Wells

APPROVAL BY THESIS DIRECTOR

This thesis has been approved on the date shown below:

Richard F. Curtis

RICHARD F. CURTIS
Professor of Sociology

Aug 20, 1965
Date

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ABSTRACT

An attempt is made to discover the significant factors contributing to cheating at the college level. Four such factors are found to be highly correlated with cheating when in particular combinations. These are as follows: alienation from the broader societal norms which condemn cheating, a believed support gained from thinking that many peers also cheat, a moral evaluation which defines certain types of cheating as permissible, and a low academic and correspondingly high social orientation.

A two step sequential process is supported by the two models used. The sequence is background (a combination of strain and constraint) -- situation (a combination of opportunity and rationalization) -- cheating. However, three and four step sequences are rejected.

An intercorrelation matrix of indicators strongly associated with cheating suggest a cheating syndrome. The two principle factors are a low academic orientation and a normative-moralistic stance which defines certain types of cheating as permissible.

Chapter I

Introduction

Theories relating to deviant behavior have previously restricted their field of inquiry predominantly to criminals and delinquents. More recently, particularly since the advent of Sutherland's thesis on white collar crime, sociologists have begun to look beyond prisons, reform schools, and slums in search of fruitful hypotheses and explanations to the question posed by deviant behavior. An area of importance which has remained relatively unexplored is that of student cheating in the schools.

Dishonesty at the college level is particularly disturbing since universities are one of the bulwarks of society representing and teaching a sense of integrity necessary in all areas where humans interact. Dishonesty at this level represents not only a denial of the objectives of education, but also indicates a basic failure on the part of one of the key socialization agents in society. The problem encompasses more than just the cheater. Cheating represents a failure of the students to receive the full benefits of the educational experience and may create a demoralizing situation for the honest students. From the

instructor's viewpoint, cheating no doubt frustrates the desire to impart knowledge.

To study cheating within the context of sociological theory requires that the process leading to cheating be viewed in a certain way. Though chapter two will cover this in greater detail, there are several points which should be mentioned now. First, there exists a standard body of norms that state what behavior is acceptable and what behavior is unacceptable. Second, another and perhaps contradictory force is the norms of smaller groups within society. Third, there exist moral judgments which crosscut both societal norms and group norms. Viewed from this perspective, cheating reflects an inability on the part of the cheater to handle the demands placed upon him in a way defined as acceptable by the standard body of norms. Alienation from these broader norms, attachments to more primary group norms, and some definition of wrongness or rightness seem to be the three most general and most important forces operating. It is from these initiating premises that an explanation of cheating begins.

The value of studying cheating as a form of deviant behavior is that it establishes a valuable compromise between two predominant theoretical viewpoints. The first

posits the existence of a standard normative code and then sees deviant behavior as oppositional to this code. The second focuses on one's chosen reference groups and defines deviant and nondeviant behavior according to what has been dictated by these reference groups. The first gives too much credit to society's ability to distinguish between law abiders and deviants while the second does not give enough weight to the existence of a standard normative code and the strength that this code carries in defining behavioral limits. Both of these viewpoints have much to offer. It seems logical to examine the rewards and punishments as conceived within the mind of the deviant as emanating from both the larger society, and the deviant's own chosen reference groups. By looking into cheating, both viewpoints can be considered, for cheating is clearly defined as deviant by school authorities, parents, and the wider society in general; in fact, recent evidence indicates that college students themselves overwhelmingly disapprove of cheating.¹ On the other hand, there is much evidence which indicates that certain subcultures at universities have overcome this overwhelming

¹William J. Bowers, Student Dishonesty and Its Control in College (The Bureau of Applied Social Research, Columbia University, 1964), p. 68.

condemnation by espousing their own code of conduct which may take precedence over broader societal values.² The high rates of cheating which have been reported would attest to this. The nature of cheating, then, should offer valuable insights into theories of deviance since it is clearly opposed by the wider society and yet is indulged in by a large percentage of students.

An additional advantage in studying cheating as a form of deviant behavior lies in the nonspecificity of the word itself. There are many forms of cheating and by breaking down cheating into particular types of behavior (copying, using crib notes, stealing exams, etc.), it may be possible to determine limits as to what types are considered permissible and what types are considered not permissible by students. If such points can be determined, then variations of this point can be observed between cheaters and noncheaters. Findings in this area may reveal actual differences in perception of a standard normative code, or on the other hand, perception of a standard normative code may be the same for both cheaters and noncheaters with the explanation for cheating lying with other factors.

²Ibid., p. 196 & Theodore Newcomb, "Exploiting Student Resources," in Research on College Students, ed. by Hall T. Sprague (Sponsored by W.I.C.H.E. & C.H.E., Berkeley, 1960), pp. 6-20.

Before closing these comments on the problem at hand, a few remarks should be directed to one of the most thorough sociological studies to date dealing with student dishonesty--a study conducted at the Bureau of Applied Social Research, Columbia University, and released in December, 1964.³ Data gathered from over 800 universities and colleges representing over 5,000 students indicate that at least half the students have engaged in some form of academic dishonesty while in college.⁴ More relevant to the purpose of this paper is the fact that while a personal sense of disapproval of cheating curtails cheating, cheaters still exist among this group. There are also many who do not cheat among those who express a weak sense of disapproval toward cheating.⁵ It would seem that by focusing on some of these deviant cases valuable insights might be gained into the more subtle pressures affecting the students in spite of their particular moral stance.

³Bowers, op. cit.

⁴Ibid., p. 193.

⁵Ibid., p. 195.

The scope and magnitude of the Columbia study points to the necessity of setting the boundaries for this paper. This necessitates a brief statement of what this study will not attempt to do. This is of prime importance in avoiding the temptation to over-generalize the findings of the study. First, the sample is taken from two introductory sociology courses, making no basis for comparing different types of universities or schools within them as contributing to cheating. Second, socialization, particularly the high school experience,⁶ no doubt plays a role, but these sources are not tapped. Third, the attempts to control cheating imposed by administrations and the method by which cheating is dealt with are important factors beyond the study. This study focuses on the college experience and seeks fruitful questions and answers within the college culture. It is hoped that by using parts of theories on the sociology of deviance, results will clarify the phenomena of cheating and add to the existing body of theory which deals with deviant behavior.

⁶Ibid., pp. 195-196.

Chapter 2

Conceptualization

There is both a multiplicity and a diversity of norms and moral definitions in American society. One may not have difficulty in gaining support for the belief that murder and rape are wrong, but there is no such consensus about premarital sex relations or falsification of income tax reports or even cheating on examinations. One might say that these latter forms of deviant behavior are wrong, but why is it then, that some reports indicate more than half the population is engaging in these types of behavior? Deviant behavior is perceived differently by different members of society: a minor who becomes intoxicated would be judged deviant by the law, but on the other hand, he might be judged deviant by his own group of friends if he refused to take a drink when his friends were passing around the bottle.

Two critical factors must be considered if one is to arrive at a meaningful understanding of deviant behavior. First, how do different groups evaluate the laws of society and to what degree are the rules that these groups set up in agreement or disagreement with the existing laws?

Second, how does being a member of a particular group affect conformity or lack of conformity both to the rules of the group and to the laws of the society?¹ These two questions can be roughly equated to two ways of looking at the study of deviant behavior. The first factor sees certain groups as less integrated with the whole society because they have less access to the phenomena which the whole society deems valuable--success.² The second factor is more concerned with the actual give and take processes of human interaction with an emphasis on group norms and values.

The principle proponent of the anomie (first) approach is Robert K. Merton. He conceives of behavior as being goal directed. These goals are desired by almost everyone in American society, and the means used to achieve these goals have also been agreed upon. The problem in our society is that the goals have become so overemphasized, that the correct or legitimate means are often ignored. At this point it would be tempting to say that those with

¹Howard S. Becker, The Outsiders (Glencoe: Free Press, 1963). chapters 1 and 2.

²Robert K. Merton, Social Theory and Social Structure (Glencoe: Free Press, 1957), chapters 4 and 5.

the greatest desire for success would be the ones most likely to forget the correct means. However, there are several other variables operative here. One is the distribution of chances to achieve success;³ it would be expected that those with less of a chance would be more likely tempted by illegal means. And by the same token, those who would by their position in the social structure be more likely exposed to illegal means, would also be more likely to employ these illegal means. However, acceptance of beliefs that illegal means are morally wrong derived from strong religious beliefs, or family attachments, or some other form of social control may act as a countervailing force. Merton's theory is helpful in recognizing deviant behavior as variations on a standard normative code. An explanation of how and why these variations come about necessitates going beyond this monolithic view of society which sees deviant behavior as dysfunctional because it disrupts the stability of society.

³Genevieve Knupfer, "Portrait of the Underdog" in Class, Status, and Power, ed. by Reinhard Bendix and Seymour Martin Lipset (Glencoe: Free Press, 1957), pp. 255-263.

This anomic view does not allow for the power that the rules of subcultures have in gaining conformity; nor does it allow for conflict arising from contradictions between norms of society and its subcultures.

To gain any sort of meaningful knowledge as to why one would deviate from laws, one must be willing to accept not only the possibility of lack of acceptance of the laws or respect for what the laws represent, but also, the possible acceptance of the laws with an even more overriding concern with conforming to the dictates of chosen reference groups. The structural approach is valuable in accounting for the distribution of strain in a social structure, but it is necessary to also explain why a person chooses form of behavior over another. In summing up the shortcomings of this approach Cohen states, "The bearing of others' experience--their strains, their conformity and deviance, their successes and failures--on ego's strain and consequent adaptation is comparatively neglected."⁴

⁴Albert Cohen, "The Sociology of the Deviant Act," American Sociological Review, 10 (February, 1965), pp. 149-159. Also see Albert Cohen, "The Study of Social Disorganization and Deviant Behavior," in Sociology Today, ed. by Robert K. Merton, Leonard Broon, and Leonard S. Cottrell (Basic Books, Inc., Publishers, New York, 1959), pp. 461-484.

If a developmental theory were to be employed, leading toward the actual commission of a deviant act, the theory would now be a little past the starting point. Granted that at least some general consensus as to a normative code is needed; the error of setting up a simple deviant-nondeviant dichotomy and then seeking differences on this erroneous basis must be avoided.⁵ A partial explanation has been developed by Merton which accounts for structural strain but this is only a start. Cohen states that if this "means-ends" notion is to be used, one must clarify how strain is generated in different individuals. To do this, it is necessary to look at different groups within the society to see what goals they are striving for, what the opportunities for achieving these goals are, and just what groups generate the greatest strain due to varying degrees of acceptance or rejection of goals and means.

Cohen suggests starting with strain and then constructing a hierarchy of constraints much as Smelser has

⁵The error lies primarily in the way the dichotomy is established. Other errors are discussed by F. I. Nye, et al., "Socio Economic Status and Delinquent Behavior," American Journal of Sociology, 53 (January, 1958), pp. 381-389. Also Harry Manual Shulman, Juvenile Delinquency in American Society, (Harper & Row, Publishers, 1961), pp. 83-138.

done in the "value added" method.⁶ Constraint would seem to involve not only the degree to which one has internalized the existing normative code but the effect that being in different groups has on the individual's choice of solutions to strain. For example, does the high aspirations of one's significant others tend to raise one's own aspirations beyond a level capable of achievement by accepted means; or does the deviance of one's significant others lead to condemnation, tolerance, or indulgence of these others?⁷

One of the links between structural strain and choice of solutions involves the notion of subcultural formation. Here is where moral support is gained; a sort of alleviation of strain by experiencing a commonality of plight. Being a member of a given type of subculture is not enough to explain the choice of solutions. The processes that go on among the members of a given type of subculture must be examined. By stating that a given subculture is at opposition with the standard normative code

⁶Neil Smelser, Theory of Collective Behavior (Glencoe: Free Press, 1963).

⁷Cohen, "The Sociology of the Deviant Act," op. cit., p. 151.

is to revert back to the simple deviant-nondeviant dichotomy mentioned earlier. By accepting the fact that the members of these subcultures still basically adhere to the standard normative code, one also has to accept more than just being a member of a given subculture as an explanation for deviant behavior.⁸

The attempt should be made to focus on the code that develops in these different groups, ignoring for the moment the relation of this code to the broader societal code. A start is made in assessing the role played by constraint by searching for the strengths of commitment to significant others. Several key elements in this highly complex process have been outlined by Parsons--support, permissiveness, denial of reciprocity, and rewards.⁹ The effects that these different forms of behavior have on the degree of commitment that one has, toward either conformity to the group's rules or deviation, must be ascertained.

⁸David Matza, Delinquency and Drift (John Wiley and Sons, Inc., New York, 1964).

⁹Talcott Parsons, The Social System (Glencoe: Free Press, 1951).

integrally associated with this notion of constraint is another important force--opportunity. It finds its roots in the differential association theorists and has been most recently stated by Cloward.¹⁰ Opportunity, whether legitimate or illegitimate, will exhibit its greatest effect due to its propinquity to the individual in question. Newcomb in evaluating opportunity states: "Cheating in one situation gives almost no information at all as to the likelihood that a child will cheat in another ...Character is found to be much less important a variable than is the situation."¹¹ Atkins and Atkins try to show that cheating is a direct proportion to the ease of cheating.¹² Cohen emphasizes, "The opportunity structure consists in or is the result of the actions of other people."¹³ This would include both support for and control against deviant actions. Obviously if one thought that many people

¹⁰Richard Cloward and Lloyd Ohlin, Delinquency and Opportunity: A Theory of Delinquent Gangs, (Glencoe: Free Press, 1960).

¹¹H. Rogosin, "What About Cheating on Examinations and Honesty?" School and Society, 74 (December, 1951), pp. 402-403.

¹²B. E. Atkins & R. E. Atkins, "A Study of the Honesty of Perspective Teachers," Elementary School Journal, 36 (April, 1936), pp. 595-603.

¹³Cohen, op. cit., p. 154.

around him were cheating on an exam this would most likely increase the chances that he would cheat.

One more variable which rests heavily on the notion that a deviant is still in accord with the basic norms (those norms having the greatest amount of consensus), of society, is that of rationalization. In a 1957 paper by Sykes and Matza, more stress was given to the interpersonal level of action in subcultures. They focused on the techniques through which the deviants justify their acts.¹⁴ Deviants are committed to the dominant normative system and yet are able to so define deviant behavior that these violations are acceptable. Matza extends this point of view by showing the delinquent's extension of the inapplicability of broader societal norms to their own case, in two ways: First, in negation of the offense; the delinquent bypasses all laws in claiming the right to defend his turf. Second, by extending the notion of a sense of injustice,

¹⁴Gresham Sykes and David Matza, "Techniques of Neutralization: A Theory of Delinquency," American Sociological Review, 22 (December, 1957), pp. 664-670. Also David Matza & Gresham Sykes, "Juvenile Delinquency and Subterranean Values," American Sociological Review, 26 (October, 1961), pp. 712-719.

delinquents can gain further measure of acceptability of illegal acts. "The cops are out to get us no matter what we do," is an example.¹⁵ A very similar position was taken by Cressey in connection with the essential kinds of psychological processes necessary for embezzlement. He states that one of these processes is, "...the ability to find a formula which describes the act of embezzling in words which do not conflict with the image of oneself as a trusted person."¹⁶

Rationalization, along with high strain, low constraint, and high perception of opportunity may be the key ingredients necessary to propel one to the actual commission of an act deemed deviant by the broader normative system. These four variables operate in different strengths and at different times at the structural and interpersonal level. Multivariate analysis would have to be used under the assumption that these variables were operating simultaneously. But all these factors are not operating at the same time; patterns of behavior are a developing and

¹⁵Matza, op. cit., Delinquency and Drift.

¹⁶Donald R. Cressey, "The Respectable Criminal," Trans-Action, 2 (March/April, 1965), pp. 12-15.

continuing process much as this paper has attempted to indicate in the earlier parts.

A sequential model has been proposed by using Merton's theory of anomie, stating what areas in the social structure might be experiencing greater strain. Incorporating the three additional variables on the more "microscopic" interpersonal level, it is hoped that a process will be disclosed. Becker illustrates this pattern in discussing the commitments that conventional people have toward a normal life.

Something of an answer to this question [why conventional people don't follow through on deviant impulses] may be found in the process of commitment through which the "normal" person becomes progressively involved in conventional institutions and behavior. In speaking of commitment, I refer to the process through which several kinds of interests become bound up with carrying out certain lines of behavior to which they seem formally extraneous. What happens is that the individual, as a consequence of actions he has taken in the past or the operation of various institutional routines, finds he must adhere to certain kinds of behavior, because many other activities than the one he is immediately engaged in will be adversely affected if he does not. The middle-class youth must not quit school, because his occupational future depends on receiving a certain amount of schooling. The conventional person must not indulge his interests in narcotics, for example, because much more than the pursuit of immediate pleasure is involved; his job, his family, and his reputation in his neighborhood may seem to him to depend on his continuing to avoid temptation.¹⁷

¹⁷Howard S. Becker, *op. cit.*, p. 27.

Though what Becker says is primarily concerned with the career development of conventional people, this statement lends itself to increasing the predictive power in determining who is likely to commit deviant acts. He states that the commission of one deviant act does not throw one into a deviant career; he is interested in increasing degrees of commitment on a path which would lead one into either a deviant or a nondeviant career. The focus of this paper is not commitment leading to a career type, but rather, committing forces which would increase the probability of engaging in a deviant act. The question as to whether the variables mentioned here are the key ones involved in leading one to commit a deviant act, and if so, whether they act in particular combinations or in some given sequence are questions considered to be of major importance. And it is primarily to a clarification of these questions, which this thesis addresses itself.

The Hypothesis. An attempt will be made to support the following sequential process leading to cheating:

Strain → Constraint → Opportunity → Rationalization → Cheating. The rest of the study will be exploratory in nature, trying to uncover other significant variables. The goal here will be to clarify otherwise vague explanations for cheating thereby enhancing the predictions of cheating.

Chapter 3

Methodology

The Measure of Cheating. This study is primarily interested in cheating as deviant behavior. The type of cheating measured must be extreme enough to be considered deviant, and yet not so extreme that no cases will be obtainable. It is also desirable to have the cheating occur under normal classroom conditions and preferably an actual behavioral measure of cheating rather than a self reporting measure. Another important consideration is that the cheating represents not only acts done alone, but also, cheating done in collusion with others, so both an accurate representation and a cross check on accuracy can be obtained on the dependent variable.

The type of measure which was chosen to best fulfill the above criteria and to establish the most clear cut dichotomy of cheaters - noncheaters was a reported score by the student after self grading. Examinations given to two introductory sociology classes were returned to the students the next class period. The instructor told the students

that the exams had not been graded.¹ They were instructed to grade their own exams and told that they could keep the exam and answer sheet and that the top of the answer sheet with their name and score was to be the only thing collected. The distortion between reported scores and actual scores obtained gave the measure of cheating.

The Sample. The two introductory sociology classes which constituted the sample contained a total of 91 students (45 in one class and 46 in the other) who took the examination. Nine students subsequently dropped the course before the questionnaire was administered, leaving 82 students in the sample. The other nine were not contacted due to the complexity (three stages in administering the questionnaire). Also, their answers would tend to be distorted. The students were told that only a number and not their name would be used--this would not be effective if questionnaires were handled individually.

Some of the characteristics of the sample were as follows: 47 females and 35 males; twice as many freshmen

¹A similar method was used by R. McQueen, "Examination Deception as a Function of Residence, Background, and Immediate Stimulus Factors," Journal of Personality, 25 (September, 1957), pp. 643-650.

as sophomores 50-24; the mean grade point average was 2.92, a 1 being an A; slightly over half the sample (52%) reported family incomes in excess of \$10,000. Forty-two students lived at home, while the rest reported living in dorms, apartments, fraternities, and sororities.

Statistical Techniques. Chi square will be employed to measure the significant differences between the cheaters and noncheaters. Strength of association of the indicators to cheating will be measured by gamma. When different indicators are combined, Tau b is used to determine the per cent error reduction in predicting cheating by knowing these combinations. The attempts to show a sequential chain of the four independent variables (strain, constraint, opportunity, rationalization) will use a model developed to show the delayed effects of father's status on son's educational career.² The model involves matrix algebra using the horizontal marginals taken from the relationship of the originating variable with the resultant

²Gösta Carlsson, Social Mobility and Class Structure (CWK Gleerys/Lund, Sweden, 1958), pp. 69-73 and 132-135.

variable. These marginals begin a chain of matrix multiplications. Additional variables which are thought to contribute or lead to the resultant variable are introduced into the chain. If the resultant distribution after the last multiplication operation is similar to the first observed distribution between the originating and resultant variable then it has been shown that the model is sound, i.e. the original relationship has been reproduced. The predictive power of the process leading to cheating has been increased by adding additional variables which reduce the error variation. Since the model is sensitive to the order in which the additional variables are introduced, the existence of a causal sequence can be hypothesized (see Appendix B). A second statistical technique, a multiple regression developed by James Coleman³ is used to clarify the relationships of the four variables in question. Very simply, the model measures the effects of one independent variable on the dependent variable, holding the other independent variable constant.

³James S. Coleman, Introduction to Mathematical Sociology (Glencoe: Free Press, Collier-McMillan Limited, London, 1964), pp. 189-203.

The model is designed for use with dichotomous variables and since the four independent variables will be divided on the basis of high and low, this model is particularly applicable. The model will be used to lend additional support to the hypothesized sequence. Very simply, by controlling for the middle variable in a three step sequence, the relation of the first to the last variable should disappear. (See Appendix B).

The Independent Variables and Their Operationalization. Four independent variables have been referred to. These variables which come from the literature must be measured.

It is desirable to examine the effects of both the wider societal norms and the norms of one's more immediate reference groups as inhibiting or contributing factors to cheating. Merton looked for strain basically at the societal level, a conflict arising from man's inability to achieve the goals set for himself. At the same time, constraint also operates, i.e., the degree of internalization of the broader societal norms which impede any propensity toward deviant behavior.

A problem at this stage is to discriminate between strain and constraint. That is, when constraint becomes low strain is expected to be high. Put differently--the more one is in accord with something, the more that something has a tendency to control him (Piaget). This is where the problem comes in. If one is to look at similarity of views as representing constraint, what is to be done when this measure defined as constraint becomes dissimilar? Could it be called low constraint or would it be called strain? The only logical answer is to say that when an indicator is chosen to represent constraint the focus is on how well a person is in accord with that indicator. When an indicator is chosen to represent strain the focus is on discordance. It is hoped that this division will offer a clearer view of the particular variable in question. (Later analysis will combine the two.) The following items are used to measure these two variables within the context of cheating.

Strain:

1. Divergency of views from church, parents, peers, and teachers (see Appendix C, page 82, and Appendix A, Item 25).

2. Importance of grades -- measuring the strength of the value attached to high grades (see Appendix C, page 82, and Appendix A, Item 8).
3. Grade point average -- measuring how well one was accomplishing the goal of high grades (see Appendix C, page 82, The item was obtained from school records).
4. The importance of parents' desire for your success -- it was thought that a high value here would create strain, particularly if the desires of the parents were not being fulfilled (see Appendix C, page 82, and Appendix A, Item 9).
5. A perception of normlessness as measured by Srole's Anomia Scale⁴ (see Appendix C, page 82, and Appendix A, Item 11).
6. Items on the student's orientation to school (academic, social, or vocational) were also included under strain.

Constraint:

1. Crissman's Scale of Moral Values⁵ measuring the degree to which those values most representative of wider societal values have been internalized by the individual (see Appendix C, page 83, and Appendix A, Item 10).
2. Religious preference.
3. Church attendance.
4. Relations with parents.

⁴Leo Srole, "Social Integration and Certain Corollaries: an Exploratory Study," American Sociological Review, 21 (December, 1956), pp. 709-716.

⁵Solomon Rettig and Benjamin Pasamanick, "Changes in Moral Values Among College Students: A Factorial Study," American Sociological Review, 24 (December, 1959), pp. 856-863.

The final two variables measure what has taken place in the actual situation where the possibility of cheating occurs. The perception of the chances of succeeding involves both the notion of how likely one is to get caught and how many others in the class are also cheating. Implicit here is the essence of Cohen's subcultural theory, i. e. support due to the fact that others are also cheating and that if one were to get caught, he would not be alone. At this point there is a problem of opportunity shading over into rationalization. A perception of high cheating could represent a rationalization, however, it seemed more fruitful to assume at the outset that there were two variables operative.

Measures of those variables used were:

Opportunity:

1. Estimate of the per cent of the class that cheated.
2. Perceived likelihood of succeeding in cheating.
3. Comparison of this class with others as to the relative ease of cheating.
4. Perception of whether the teacher would report cheating (See Appendix C, page 84, and Appendix A., Items 21, 22, 23, and 24.)

Rationalization:

1. Six items connected with the course, the teacher, the test, and the grading of the test, all which might "neutralize" the stigma of cheating are included. For example, the subject is asked to agree or disagree with -- "I really don't care about learning the subject matter of this course, I just want a good grade," (see Appendix C, pages 84-85, and Appendix A, Item 18).
2. Reasons for taking the course were also thought to constitute possible rationalizations -- (a) To satisfy a University requirement, and (b) To fit into my schedule (see Appendix C, page 85, and Appendix A, Item 19).
3. A rating of the course. If a course is thought not to be worthwhile or the subject matter is not interestingly conveyed, this might be a further-factor contributing to cheating (see Appendix C, page 86, and Appendix A, Item 17).

Three questions (14, 15, 16) are used to ascertain the degree to which students define cheating as deviant. Item 14 sets up a hypothetical situation (which actually should apply to all students) and then asks the student to check the different degrees of cheating he would engage in depending on who knew about it. Item 16 actually asks the student to define how wrong is each of these types of cheating. Item 17 asks for the same definition from a different perspective. The student is asked to indicate which of the cheating types of behavior is as wrong as taking money from a friend.

The Questionnaire. The questionnaire was administered in three separate intervals. The first occurred approximately three weeks after the examination while students were still unaware that their cheating was being studied. The first six pages of the questionnaire containing the background variables of strain and constraint were given at this first session. The following class period, they were told that their actual scores were known and they were asked to answer questions referring to the variables of opportunity and rationalization. In order to secure cooperation they were told that the examiner had a record of who had cheated, that they were known only by a number, and that all information was to remain within the confines of the study.

A final single page, including several questions on how the students studied for the exam, was given two weeks after the second part. Several questions concerning the attitude of the general student body toward cheating were given to check and compare with earlier and more specific forms of cheating as well as to correlate with similar questions in Bower's study.

Reliability and Validity. Several measures to check on reliability have been mentioned. The third questionnaire tapped several items which had been asked earlier to see if the results were consistent. Further, the second questionnaire was also administered to a graduate student's class to test for similarity of answers among cheaters and non-cheaters under quite different circumstances (none of the results from this class were presented; however, no differences were observed in this class which would alter conclusions in the principle analysis).

Validity for the measures of the dependent variable was gained by employing a second measure of cheating. The method used was agreements of wrong answers among students in adjacent seats. This measure compares with the falsification measure as follows:

Table 3.1

Comparison of the Two Measures of Cheating

Number of Agreements Per Pair of Papers	Probability ^a	Students Who Altered Score	Students Who Did Not Alter Score	TOTAL ^b
10	p .01	7	1	8
9	p .04	9	2	11
8	p .08	11	4	15
7	p .18	15	8	23

^a Probability that the number of agreements per pair occurred by chance.

^b Totals for each row indicates number of cheaters so defined by the number of agreements of wrong answers.

A difference in cheating rates between the two classes was expected due to a difference in seating arrangements. One class was alphabetically seated while no arrangements were imposed on the other class. It is felt that there would be more copying in the freely seated class since copying is facilitated by cooperation with a friend. Results showed that the mean agreement of wrong answers in the freely seated class did exceed the mean agreements for the alphabetically seated class, 5.11 to 4.64, but a difference of means test yielded a t of 1.52 which does not allow rejection of the null hypothesis of equal means. For this reason, the classes were combined for all future analysis.

Validity in the case of questions measuring the independent variables was more difficult. Validity here must be determined by the logic of the argument. As to the individual questions chosen, these were derived from three sources -- questionnaires on previous cheating studies, ideas gathered from actually talking with students, and many conferences with the members of this author's committee, to check the consistency of what was attempted.

Chapter 4

Results

The Dependent Variable. After grading exams, the students reported their score. Discrepancies between this score and the actual score are defined as cheating. Students who reported a correct score or lower (due to a mistake in grading) are defined as noncheaters. Those who improved their score by one point are defined as borderlines. Those who improved their score by 2 or more are defined as cheaters. Of the 88 students in the sample, 54 are noncheaters, 12 are borderlines, and 22 are cheaters. Analysis will not include the borderlines. Sometimes the borderlines correspond with the cheaters and other times with the noncheaters (see Appendix C where the borderlines are included in all item distributions). This inconsistency together with the desire not to draw a finer line between the original dichotomy of cheaters and noncheaters explains the dropping of borderlines from the analysis. The results of the measure are shown in Table 4.1.

Table 4.1

Results of Distorted Score Measure of
Cheating By Amount Score Was Changed

Reported Score	Number of Students	How Sample Was Trichotomized
Reported a Worse Score.....	5	Defined as Noncheaters
Reported a Correct Score	49	
Reported a Better Score:		Defined as Cheaters
by 1 point	12	
by 2 points	4	
by 3 points	0	
by 4 points	2	
by 5 points	3	
by 6 or more points.	13	
Total	88 ^a	

^aDue to absences and drops when later questionnaires are given, the final sample consists of 50 noncheaters, 11 borderlines, and 21 cheaters.

The Independent Variables. Twenty-four questions are used as measures of the four independent variables. A short description of these questions and the strength of association with cheating are given in Table 4.2. Seven of these indicators show a significance at the .05 level. Each response to a question yielded a prediction of cheating

behavior. Hence, all negative associations in the table indicate incorrect predictions. However, only one of these is significant, i.e. the importance of grades under the variable strain. It is thought that if the student highly values grades and the importance of the parent's desire for the student's success is correspondingly high, a strain type of situation will be created making it necessary to possibly cheat if these desires are not fulfilled. As is indicated, cheaters do not highly value good grades (the question asked the students to indicate the importance of trying for A's and B's rather than settling for less). The function that grades play in cheating is a crucial one, but not to the extent of earning A's and B's. Rather, it is to keep the student in school. The mean grade point average of the cheaters is 3.23 which is less than a C average.

Analysis of data in succeeding sections of this chapter will focus on the highest associations as indicated by Table 4.2. All will be in the direction predicted except importance of grades. This will be used, but reinterpreted in the opposite direction, as a factor contributing to cheating. First, the hypothesized causal sequence will be dealt with, using the strongest indicators for each of the four independent variables.

Table 4.2

Association Between Cheating and Each
Indicator of the Four Independent Variables^a

Indicators of Independent Variables with Predicted Direction Conducive to Cheating Listed First (on top)	Per cent Total Cheaters ^b Cases Gamma
1. <u>Strain:</u>	
a. Divergency of views from church, parents, and teachers.	(High) 52 (29) (Low) 14 (42) <u>.724^{*c}</u>
b. Academic orientation.	(Low) 38 (37) (High) 18 (33) <u>.465</u>
c. Social orientation.	(High) 36 (42) (Low) 18 (23) <u>.438</u>
d. Grade point average (low means below the mean).	(Low) 41 (29) (High) 22 (32) <u>.432</u>
e. Vocational orientation.	(High) 29 (35) (Low) 29 (35) <u>.000</u>
f. Perception of normlessness by Srole's Anomia Scale.	(High) 29 (31) (Low) 30 (40) <u>-.023</u>
g. Importance of parent's desire for student's success	(High) 28 (40) (Low) 53 (29) <u>-.162</u>
h. Importance of the grades to the student.	(High) 14 (29) (Low) 40 (42) <u>-.619[*]</u>
2. <u>Constraint:</u>	
a. Crissman Scale of Moral Val- ues (low being below mean).	(Low) 41 (37) (High) 18 (34) <u>.522[*]</u>
b. Religious preference.	Protestant 26 (42) Catholic 42 (19) Jewish 0 (1) Other 33 (6) None 0 (3)
c. Church attendance.	(Low) 32 (47) (High) 25 (24) <u>.169</u>
d. Relations with parents.	(Close) 32 (22) (Not) 27 (48) <u>.114</u>

Table 4.2 -- Continued.

3. <u>Opportunity:</u>			
a. Estimate per cent of class that cheated.	(High)	63 (24)	
	(Low)	13 (47)	.839*
b. Perceived likelihood of succeeding.	(High)	59 (17)	
	(Low)	22 (51)	.677*
c. Comparison of this class to others as to ease of cheating.	(Easier)	25 (12)	
	(Harder)	32 (53)	-.172
d. Believe that teacher would not report cheater.	(High)	60 (5)	too few
	(Low)	28 (64)	cases
4. Rationalization: (student's viewpoint)			
a. Emphasis on grades is too great.	(Yes)	48 (29)	
	(No)	17 (42)	.647*
b. Made error in grading.	(Yes)	50 (26)	
	(No)	18 (44)	.636*
c. Took course to fit schedule.	(Yes)	32 (28)	
	(No)	27 (33)	.116
d. Test was poor measure of knowledge of subject.	(Yes)	31 (36)	
	(No)	29 (34)	.027
e. Took course to satisfy a requirement.	(Yes)	28 (36)	
	(No)	29 (28)	-.020
f. Rate the course.	(Low)	29 (24)	
	(High)	30 (46)	-.030
g. Ends are more important than means.	(Yes)	29 (21)	
	(No)	31 (49)	-.049
h. Do not care about the course.	(Yes)	25 (16)	
	(No)	31 (55)	-.146

^aFor an item by item breakdown with the actual scaled responses and Chi square values, see Appendix B.

^bThe total sample is 71, 21 of whom are cheaters (borderlines are not included).

^cSignificant at the .05 level.

Testing the Hypothesis of a Causal Sequence. The strongest indicator of each independent variable is first chosen, in an attempt to demonstrate a causal sequence. As is shown in Table 4.2, the strongest indicators are as follows: strain--divergency of views from church, parents, and teachers; constraint--Crissman Scale of Moral Values; opportunity--estimate the per cent of the class that cheated; and rationalization--emphasis on grades is too great.

All possible sequences (60) that can be run using the indicators of the four independent variables in any order and in any combination of two or more are subjected to Carlsson Model (see Appendix B). The original hypothesized chain is strain-constraint-opportunity-rationalization-cheating. When subjected to the model, this sequence explains less than two per cent of the original relationship between strain and cheating. In fact, the average percentage explained when all four variables are used is only 3.8. The hypothesized sequence has to be rejected. A three step process also has to be rejected since the mean percentage explained by these chains is only 9.6. The best results are clearly gained when only two indicators are employed--the mean percentage explained by these chains is 31.9.

The best sequence is constraint-opportunity-cheating, where nearly 60% of the original relationship existing between constraint and cheating is explained. This means that when high opportunity (estimate the percentage of the class that is cheating) is added to low constraint (Crissman Scale) in a causal sequence, a strong chance of cheating exists. Good results are also obtained with other sequences using two independent variables but it is desirable to have stronger basis for concluding that a given process is taking place, than merely one indicator for a given variable (see the explanation for Table 2.1 in Appendix B). Therefore, the variables are broadened (strain and constraint are combined into "background", and opportunity and rationalization are combined into "situation"). Justification for this is gained by referring back to the original conceptualization. Strain and constraint are operationalized to measure background factors contributing to deviant behavior. Opportunity and rationalization are operationalized to measure situational factors contributing to deviant behavior. Though they were at first kept separate in an effort to observe finer distinctions within the two areas, it now might be fruitful to combine them.

Five indicators are chosen to represent these two new variables. The indicators assigned to background will have nothing to do with the cheating experience while indicators assigned to situation will directly refer to cheating.

Table 4.3

Indicators of the Background and Situation
Indices^a

BACKGROUND:

1. High divergency of views from church, parents, and teachers.
2. Low Crissman Scale score.
3. Low importance of grades to the student.
4. Low academic orientation.
5. Low grade point average.

SITUATION:

1. Estimate the per cent of the class that cheated.
2. Perceived likelihood of succeeding.
3. Emphasis on grades is too great.
4. Made error in grading
5. Ends are more important than means.

^aChi square of background index to cheating is 5.124. Chi square of situation index to cheating is 18.616. Chi square between indices is 14.010.

Each student scored a 1 if he possessed the indicator in the direction conducive to cheating and a 0 if he did not. For each index the student could obtain a score of from 0 to 5. If he scored 3, 4, or 5 he is labeled as being

highly conducive to cheating on the index, while a score of 0, 1, or 2 is a low rating.

Returning to the predicted causal sequence now shortened to background-situation-cheating, the sequential model generates good results.

Illustration 4.1

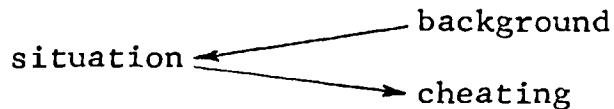
Results with the Sequential Model Using
the Indices for Background and Situation

<u>36</u>	$\begin{matrix} .64 & .36 \\ .20 & .80 \end{matrix}$	(=)	$\begin{matrix} 23 & 13 \\ 7 & 28 \end{matrix}$	(x)	$\begin{matrix} .53 & .47 \\ .12 & .88 \end{matrix}$	(=)	$\begin{matrix} 13.75 & 22.25 \\ 7.07 & 27.93 \end{matrix}$	(Actual) ¹
<u>35</u> (x)	↑	Situation	↑	Cheat Honest	↑	Cheat Honest	↑	$\chi^2 = .38$
Back-ground	Hi	$\begin{matrix} 23 & 13 \\ 7 & 28 \end{matrix}$	Situation	Hi	$\begin{matrix} 16 & 14 \\ 5 & 36 \end{matrix}$	Back-ground	Hi	$\begin{matrix} 15 & 21 \\ 6 & 29 \end{matrix}$
Lo	Lo	Lo	Lo	Lo	Lo	Lo	Lo	<u>36</u> <u>35</u>

The total now explained by the model is 71.3%.

Using the total indices of background and situation in the Coleman Model can add further evidence to the results displayed in Illustration 4.1. The notion is to show that background is related to cheating in an indirect way through situation.¹

¹Hubert M. Blalock, Social Statistics (McGraw-Hill Book Company, Inc., 1960), pp. 337-343.



A first order partial regression of background with cheating, controlling for situation, should reveal no relationship if the predicted sequence is valid. When the two complete indices are run through the Coleman Model (see Appendix B, for a methodological explanation) additional support is gained for the prediction. When situation is controlled, 4.5% of cheating is explained by background factors. Controlling for background, 36.5% of cheating is explained by situation. This is as expected. Background though significantly related to cheating by a Chi square test, explains very little when the situation is controlled.

It has been demonstrated that students found to possess certain background factors conducive to cheating (low grade point average, low perception of moral values, divergency of views from significant others, low academic orientation, and little desire to try for A's and B's) will be much more likely to take advantage of a situation conducive to cheating than will those students found not to possess these characteristics. Further, by delineating which background factors are important, a clearer picture

of what causes cheating has been gained. But though the simplified causal sequence does suggest a process leading to cheating, details of the process have been lost due to the necessary broadening of the original variables of strain, constraint, opportunity, and rationalization into background and situation. It can be concluded that the two step process has been confirmed, but it really does not say enough. For this reason, it would be worthwhile to approach the explanation for cheating from a different angle. That is, to reexamine the indicators (Table 4.2) searching for a cheating "syndrome". This should be done not only thinking about the indicators in the way they have been operationalized in this study, but also, to reinterpret the indicators according to how they interrelate and what they actually measure.

A Different Approach as to What Causes Cheating.

Focusing on the presence or absence of particular indicators should reveal that certain factors go together in leading a student to cheat. The strongest indicators for the four independent variables as originally operationalized are combined in all possible ways to see which combinations best predict cheating. When a combination of two is used, opportunity and rationalization are the best predictors of

cheating (yields Tau b = .332 -- by knowing these two, error in predicting cheating is reduced 33.2%) while the addition of rationalization created the best predictor when three indicators were used (Tau b=.376). A cheating syndrome made up of the four indicators thought to be crucial, shows that 8 of the 21 cheaters are high in every indicator while 15 of the 50 noncheaters are low in every indicator. Knowledge of these four indicators yields a Tau b of .433.

An alternative approach which still seeks a cheating syndrome can be pursued by ignoring the original operationalization of the variables. Instead, a group of the strongest indicators chosen from Table 4.2 with no regard for strain, constraint, opportunity, and rationalization can be intercorrelated. Groupings of the indicators can then be sought on this basis, and the meaning of these groupings can be reinterpreted both on the basis of the groupings and a reconsideration of what the indicators measured.

Table 4.4

An Intercorrelation Matrix of 10 Indicators
Strongly Associated with Cheating

	1	2	3	4	5	6	7	8	9	10
1.		.341	.187	.224	.376	.527	.300	.313	.071	.297
2.			.542	.179	.187	.315	.283	.346	.232	.420
3.				.266	.295	.130	.272	.205	.152	.141
4.					.268	.257	.281	.370	.071	.071
5.						.302	.255	.255	.118	.210
6.							.095	.205	.118	.274
7.								.031	.071	.224
8.									.118	.302
9.										.084
10.										

1. Divergency of views from church, parents, and teachers.
2. Low importance of grades to student.
3. Low academic orientation.
4. Crissman Scale (low).
5. Estimate per cent of class that cheated.
6. Perceived likelihood of succeeding.
7. Emphasis on grades is too great.
8. Made error in grading.
9. Low grade point average.
10. Ends are more important than means.

A grouping process² fails to combine more than any three indicators. A third indicator cannot be added to the highest intercorrelation found between a low academic view

²Harry H. Harman, Modern Factor Analysis (The University of Chicago Press, 1960), pp. 133-140.

and a low importance attached to grades. The same can be said for the second highest pair wise combination, divergency of views from significant others and the perceived likelihood of succeeding at cheating. A cluster of three factors at a lower level of intercorrelation is found among the Crissman Scale of Moral Values, a high estimate of the per cent of the class that cheated, and agreeing with the statement that it is permissible to report an answer as correct when one really knows the right answer but checked a wrong one.

When these groupings are related to cheating the two highest correlated indicators, low academic orientation and low importance attached to grades gave a $Tau\ b = .119$. Divergency of views and perceived likelihood of succeeding give $Tau\ b = .165$. The three group cluster of indicators give a $Tau\ b = .327$. None increase predictability of cheating over the two or three variable combinations gained from using the strongest indicator of the four independent variables. However, when the indicators in the two group combinations are combined, the resultant four indicators cluster gives a better $Tau\ b$ than did the corresponding four variable cluster tried earlier .501 to .433. To

reinterpret a cheating syndrome using these latter four indicators seems to point both to a lack of acceptance of a normative code espoused by parents, school, and church as well as a nonacademic orientation perhaps more concerned with such things as social successes.

The Effects of Student Definitions of Cheating.

Eight indicators are used to determine whether a student defines cheating as either permissible or bad. Indicators include items 14 (1 and 2), 15, and 16 of the questionnaire. Three approaches are used here to get at how students define cheating. The first employs the effects of social control, that is, how a student would behave if no one knew of his behavior. A second measure employs a Crissman type ranking of the kinds of cheating behavior ranging from little wrong to extremely wrong. Finally, the student is asked to compare the severity of types of cheating with another form of behavior--taking money from a friend. These three factors are directly referring to copying and reporting a false score, since these are the actual types of cheating measured in this experiment.

For each of the indicators the student is given a 1 if he says cheating is permissible and a 0 if he indicates

cheating is bad. Scores of 0, 1, or 2 are defined as saying cheating is bad and a total score of three or more is defined as saying cheating is permissible. The following distribution is revealed:

Table 4.5

The Way Cheating Is Defined

Cheating defined as:	Permissible Bad	Cheaters		Honest	$\chi^2=19.279$
		16	11		
		5	39		

A strong relationship has now been established between the way cheating is defined, and who cheats and who does not cheat. When this information is combined with which students are high and low on the four independent variables (original conceptualization) several findings are revealed in Table 4.6.

Table 4.6

Ranking of the Strongest Indicators of
the Four Independent Variables and How
Cheating is Defined by Cheaters and
Honest Students

		Oppor- tunity		Strain		Rational- ization		Constraint	
		Hi	Lo	Hi	Lo	Hi	Lo	Lo	Hi
Cheaters	Defined as o.k.	14 ^a	2	14	2	11	5	13	3
	Defined as bad	1	4	1	4	3	2	2	3
Honest	Defined as o.k.	3	8	7	4	6	5	7	4
	Defined as bad	6	32	7	32	9	30	15	24

^aNumbers represent actual cases.

It is important to examine those students who define cheating as bad and yet cheat and those who define cheating as permissible and yet remain honest. One quite noticeable divergence from trends in Table 4.6 is the presence or absence of opportunity perception among honest students who said cheating is permissible. In the other three indicators this group all rank high. It will be recalled that the opportunity indicator is--What is your estimate of the

per cent of the class that reported a false score on the last exam? The evidence just cited indicates that lack of belief in a high rate of cheating by other students is an important inhibiting factor. This becomes even more significant when it is realized that this group of 11 students is high on all other indicators found to be significantly related to cheating. A possible explanation here would be where the line is actually drawn to stop cheating. Quite obviously this is a function of where the student thinks others draw in the line. When a close look is taken at how these 11 students define the different types of cheating, everyone indicates to some degree that copying is all right. At the same time, all indicate on at least one of the defining measures (items 14, 15, and 16) that reporting an incorrect score is bad, and 8 of those 11 students indicate on all measures that reporting a false score is bad. In other words, where a student thinks that the rest of the student body stands in regard to defining particular types of cheating as bad or permissible, is a key factor in determining cheating or honesty.

Table 4.6 also reveals that there are 5 students that define cheating as bad yet are cheaters. These few

cases prevent any thorough conclusions about what the data indicate. However, one finding which merits further investigation is the presence or absence of the rationalization indicator. The majority of the group are high on this indicator while low on the other three. It is noted that none of these 5 cheaters actually confess (see Appendix D, cases 2, 3, 7, 16, and 17) which indicates that they did not actually consider themselves guilty. Further, 4 of these 5 did not estimate a high rate of cheating among other students so the explanation here has to be different than it was in the preceding paragraph. Two of the five indicate that they made mistakes in grading and the other three agree with the following indicator of rationalization: "sometimes it does not seem to matter how one gets a grade." The possible role played by rationalization may be a key one, and the explanation offered here should be pursued with larger samples.

Discussion. Four factors when taken together would seem to offer a powerful explanation of cheating. These are as follows: the strength of adherence to a broader normative code, the code which the cheaters believe exists, a moral interpretation of various forms of cheating behavior, and the orientation toward school.

A negative position involving all four of these factors best explains cheating, but the process is not this simple. By offering one blanket explanation for cheating much is lost in the more detailed combinations of the four factors.

Variations from the general pattern have been pointed out. The five cheaters who defined cheating as bad would seem to be more in accord with the broader normative code toward cheating. However, their mean grade point average of 4.07 (below a D) places them in a precarious position as far as staying in school is concerned. The reason for cheating by this group may lie in the ability to overcome the force of adhering to the broader normative code through some process of rationalization. Interestingly enough, these five students did not confess when asked to explain why they had or had not cheated, whereas all 16 other cheaters do confess. Four of the five estimate a low rate of cheating by the rest of the student body in addition. It is the belief of this author that these five so qualify their cheating, that they do not even consider themselves guilty (evidence is conclusive that they had cheated--the number of points by which they altered their scores are 2,

5, 6, 9, and 6). However, since the rationalization measures did not precede the cheating measure, the above speculation cannot be established from this study.

To explain the 11 students who said that cheating is permissible yet did not cheat, requires another examination of the four key factors. The grade point average again plays a part--the mean for these 11 is a fairly respectable 2.67. Additionally, the explanation for not cheating now seems to be lack of normative support from one's peers (eight of these 11 did not estimate a high percent of cheating by the rest of the class).

Summary. An attempt is made to confirm an hypothesized four step causal sequence using indicators for the variables strain, constraint, opportunity, and rationalization. This sequence is rejected. A three step process using combinations of these four variables is also rejected. A two step process is tentatively accepted, but further support for the sequence is attempted both by indexing, and by using the Coleman model, again with the index. Such a sequence of background (a combination of five indicators originally used to measure strain and constraint) -- situations (a combination of five indicators originally used to

measure opportunity and rationalization) -- cheating, is supported by these latter two methods.

Further, exploration of the data is undertaken in search of combinations of the indicators to establish a cheating syndrome. A combination of the four strongest indicators for each of the originally conceptualized variables of strain, constraint, opportunity, and rationalization reduces the error in predicting cheating by 43.3%. A combination of four indicators, matched on the basis of high correlation with each other, reduces the error in predicting cheating by 50.1%.

Several additional factors are also revealed. A desire for grades is a crucial part of cheating, but the desire is not so much for A's and B's, but rather, for passing grades which will enable the student to stay in school. Also, the way a student actually defines cheating plays an important role in determining honesty or cheating. It seems that students who define cheating as permissible yet remain honest do so partly because they realize the boundaries that their peers set on what is acceptable and unacceptable behavior. On the other hand, students who define cheating as bad, yet cheat, overcome this paradox

through some method of rationalization which is so effective that they actually do not consider themselves guilty.

The reader is reminded that these latter statements are only hinted at in the data and not confirmed.

Chapter 5

Conclusions

The goal of this paper was to uncover the important variables from existing sociological literature on deviant behavior that would best explain cheating. Many of the high relationships attest to the success of uncovering some of these factors.

Much time was spent in attempting to establish a causal sequence. The method of operationalizing the variables and the results of the model contained weaknesses which prevent any definite conclusions about a sequence. Both models used to support a two step (background-situation) process leading to cheating do lend support to that process. This at least indicated that more is involved in cheating than merely the conduciveness of the situation. The sequence points up the value of previous orientations and connects these orientations with situational factors conducive to cheating, indicating that a "committing" process either toward or away from cheating does exist. The factors involved in this process are the key to explaining cheating, and many of these factors have been found.

The existence of a strong measure of the dependent variable combined with many strong indicators provides an excellent base from which to begin an exploration of a cheating syndrome. The importance of orientations within the college culture has been confirmed. It is hoped that as various subcultures within the college environment become more clearly delineated, an effort will be made to discover the normative codes and moral definitions of these subcultures. Data from this study show that groups which have little commitment to academic life and are more concerned with social success do indeed have an increased proneness to cheat. The following hypothesis taken from Bower's study is probably true, but it is only a part explanation of the cheating syndrome-- "...students who place primary emphasis on intellectual matters are more committed to the academic life and more sensitive to the norms of academic integrity that govern it."¹

The effects of the broader normative code must not be underestimated. Adherence to this code and preserving

¹Bowers, op. cit., p. 195.

a righteous type self-image (see the reasons given for not cheating by the noncheaters in Appendix D) are key factors in not cheating. However, a strained situation exists for students who are not doing well in school, and who also adhere to a righteous type self-image. A quarter of the cheaters in this sample fall into the above category. It is hoped that future research will attempt to support the importance of rationalization to cheating which is suggested here. It will be necessary to have measures of rationalization precede the cheating experience, something which was not done here.

This study has pointed to important factors both in a student's background and in the situation which contribute to cheating. Much more needs to be done in determining where, or how, many of these factors come about. For example, the importance of a student's moral stance has been shown, but how does it develop and to what extent is it influenced by normative perceptions? It appears necessary to explain both the early home life and the early school experiences of students.

Cheating has been explored mostly from ideas found within sociological literature on deviant behavior. The

findings in this study should have relevance to explaining other forms of deviant behavior. Older theories which viewed deviant behavior as a lower class phenomenon to be explained by alienation from the broader normative code certainly have proved inadequate. These theories have ignored both the power of the reference groups, and the actual location of deviant behavior in the class structure. Findings in this study are particularly applicable to white collar crime where commitment to the broader normative code is still evident. The process of rationalization should certainly be prevalent in white collar crime as should moral definitions based more on utility than tradition. The process of preserving a righteous type self-image before engaging in embezzlement, that was mentioned earlier by Cressey,² seems to apply in the case of cheating. Confirmation here can be directed back not only to embezzlement, but to other types of deviant behavior where strong attachments to broader normative codes still exist.

Control, and the presence or absence of opportunities to engage in deviant behavior should not be overlooked. The

²Cressey, op. cit.

borderlines in this study were high in strains conducive to cheating, but the control of parents, school, and church seemed to act as a deterrent. When attachment to these significant others is not present, other possible controls may prove effective. The part played by control is certainly important in curtailing deviance where a propensity toward deviant behavior already exists. The effects of various controls should be assessed in the area of crime prevention.

This study concludes as it began. Cheating like other forms of deviant behavior is integrally related with frustrations arising from inability to obtain certain goals. But this is only part of the story. Perceived normative differences from parents, church, and teachers and believed normative support from peers play a large part as does the moral stance taken toward cheating. The syndrome is much too complex and diverse to discern a sequence. The best that can be said in this respect is that background factors play a part and in all probability are an important initiator in propelling one toward cheating, but more is needed. Many factors are specified as are their

relations to each other. A vague notion of what goes into the process leading to cheating has certainly been clarified. It is the hope of this author that further research in this area will use what has been presented here both for confirmation of some ideas and speculation for others.

Appendix A

THE QUESTIONNAIRE

RESEARCH QUESTIONNAIRE

March, 1965

Data is being gathered on students and their attitude toward college. Though we do not need your name, we have assigned each of you a number which is necessary for proper classification. It is very important that you be completely honest in answering all questions. Please give all questions your close attention and answer them truthfully. Remember, all information is confidential. Thank you for your cooperation.

(Check the blanks that apply to you.)

1. At the present time do you: Yes No
- a. Live on campus?
 - b. Live at home?.....
 - c. Live elsewhere?
 - d. Belong to a sorority or fraternity? ..
 - e. Hold any student offices?
 - f. Work part time?
 - g. Participate in campus activities?

how many?

2. In what size community have you spent most of your life?
- a. A city over 200,000 people
 - b. A city of 10,000 to 200,000 people
 - c. A town under 10,000 people
 - d. On a farm

3. Indicate the last year of schooling completed by both your father and your mother:

- | <u>By Father</u> | <u>By Mother</u> |
|--|-----------------------------|
| a. <input type="checkbox"/> some grade school | a. <input type="checkbox"/> |
| b. <input type="checkbox"/> completed eighth grade | b. <input type="checkbox"/> |
| c. <input type="checkbox"/> some high school | c. <input type="checkbox"/> |
| d. <input type="checkbox"/> completed high school | d. <input type="checkbox"/> |
| e. <input type="checkbox"/> some college | e. <input type="checkbox"/> |
| f. <input type="checkbox"/> completed college | f. <input type="checkbox"/> |

4. What is your estimated family income?

- a. Under \$5,000
- b. \$5,000 to \$10,000
- c. \$10,000 to \$15,000
- d. Over \$15,000

5. What is your religious preference?

- a. Protestant
- b. Catholic
- c. Jewish
- d. Other
- e. None

6. How often do you attend religious services?

- a. Weekly
- b. Often
- c. Seldom
- d. Never

7. Concerning your relations with your family (particularly your parents), would you say that you were:

- a. Extremely close
- b. Close
- c. Not too close
- d. Not at all close

8. How important is it for you to get excellent grades in college (trying for 1's and 2's rather than settling for less).

- a. Very important
- b. Fairly important
- c. Not very important
- d. Little if any importance

9. How important to you is your parent's desire for you to succeed in college?

- a. Very important
- b. Fairly important
- c. Not very important
- d. Not at all important

10. Below are presented a number of situations which you are to evaluate in terms of "rightness" or "wrongness." Encircle the "1" if the item seems least wrong or not wrong at all, and the number "10" if you judge the item most wrong. Use the in-between numbers for in-between degrees of rightness or wrongness (the higher the number, the more wrong you consider the situation).

1. An industry maintaining working conditions for its workers known to be detrimental to their health.

Least Wrong	1	2	3	4	5	6	7	8	9	10	Most Wrong
-------------	---	---	---	---	---	---	---	---	---	----	------------

2. A doctor allowing a badly deformed baby to die when he could save its life but not cure its deformity.

Least Wrong	1	2	3	4	5	6	7	8	9	10	Most Wrong
-------------	---	---	---	---	---	---	---	---	---	----	------------

3. A legislator, for a financial consideration, using his influence to secure the passage of a law known to be contrary to public interest.

Least Wrong	1	2	3	4	5	6	7	8	9	10	Most Wrong
-------------	---	---	---	---	---	---	---	---	---	----	------------

4. A nation dealing unjustly with a weaker nation over which it has power.

Least Wrong	1	2	3	4	5	6	7	8	9	10	Most Wrong
-------------	---	---	---	---	---	---	---	---	---	----	------------

5. A prosperous industry paying workers less than a living wage.

Least Wrong	1	2	3	4	5	6	7	8	9	10	Most Wrong
-------------	---	---	---	---	---	---	---	---	---	----	------------

6. Falsifying a child's age to secure reduced fare.

Least Wrong	1	2	3	4	5	6	7	8	9	10	Most Wrong
-------------	---	---	---	---	---	---	---	---	---	----	------------

7. Not giving to support religion when able.

Least Wrong	1	2	3	4	5	6	7	8	9	10	Most Wrong
-------------	---	---	---	---	---	---	---	---	---	----	------------

8. Keeping the overchange given by a clerk in mistake.

Least Wrong	1	2	3	4	5	6	7	8	9	10	Most Wrong
-------------	---	---	---	---	---	---	---	---	---	----	------------

9. Seeking divorce because of incompatibility when both parties agree to separate (assuming no children).
- | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
| Least Wrong | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Most Wrong |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
10. Taking one's own life (assuming no near relatives or dependents).
- | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
| Least Wrong | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Most Wrong |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
11. Using profane or blasphemous speech.
- | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
| Least Wrong | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Most Wrong |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
12. Seeking amusement on Sunday instead of going to church.
- | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
| Least Wrong | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Most Wrong |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
13. Advertising a medicine to cure a disease known to be incurable by such a remedy.
- | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
| Least Wrong | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Most Wrong |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
14. Misrepresenting the value of an investment in order to induce credulous persons to invest.
- | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
| Least Wrong | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Most Wrong |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
15. A nation at war using poison gas on the homes and cities of its enemy behind the lines.
- | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
| Least Wrong | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Most Wrong |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
16. A man deserting a girl whom he has gotten into trouble without himself taking responsibility.
- | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
| Least Wrong | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Most Wrong |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
17. Disbelieving in God.
- | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|
| Least Wrong | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Most Wrong |
|-------------|---|---|---|---|---|---|---|---|---|----|------------|

11. Please check (✓) the blank which best fits the way you feel about the next five statements.

1. Most public officials (people in public office) are not really interested in the problems of the average man. strongly agree ___ agree ___ undecided ___ disagree ___ strongly disagree ___
2. These days a person doesn't really know who he can count on. strongly agree ___ agree ___ undecided ___ disagree ___ strongly disagree ___
3. Nowadays a person has to live pretty much for today and let tomorrow take care of itself. strongly agree ___ agree ___ undecided ___ disagree ___ strongly disagree ___
4. In spite of what some people say, the lot (situation, condition) of the average man is getting worse, not better. strongly agree ___ agree ___ undecided ___ disagree ___ strongly disagree ___
5. It's hardly fair to bring a child into the world with the way things look for the future. strongly agree ___ agree ___ undecided ___ disagree ___ strongly disagree ___

12. In connection with the following statements, please indicate the degree to which college is important to you. You may do this by placing the letter (a, b, c, or d) which applies in your case in the space provided before each question.

- a. College is very important to me in this connection.
- b. College is fairly important to me in this connection.
- c. College is not very important to me in this connection.
- d. College is not at all important to me in this connection.

"GOING TO COLLEGE IS IMPORTANT TO ME IN CONNECTION WITH..."

- ___ 1. Permitting me to be creative and original.
- ___ 2. Enabling me to become independent of home and parents.

- 3. Increasing my chances after college, to maintain or better my economic position.
- 4. Enabling me to obtain personal recognition for scholastic achievement.
- 5. Its offering fairly good opportunities for me to find a marriage partner.
- 6. Helping me to develop the ability to work with people.
- 7. Providing me with the opportunity to use my special abilities or aptitudes.
- 8. Enabling me to gain the acceptance and recognition of persons like myself.
- 9. Equipping me to be able to earn more money after college than I would earn if I did not go to college.
- 10. Providing me with an intellectual challenge.
- 11. Enabling me to make social contacts.
- 12. Enabling me to look forward to a secure future.
- 13. The opportunity it affords me to become a cultured individual.
- 14. Affording opportunities such as clubs, sororities, fraternities, etc.
- 15. Equipping me with the knowledge or training I will need for my chosen occupation.

13. Now, rate the following items as H=high; M=medium; and L=low as to their relative importance to you.

- a. Getting good grades
- b. Receiving faculty recognition for achievement
- c. Being able to master a certain body of material
- d. Being popular with other students
- e. Being able to get a lot of good dates
- f. Having a good time while in college

Now, indicate by name, any friends that you have in this class (include those whom you associate with only in class).

1. _____ 2. _____ 3. _____ 4. _____

Thank you very much for your help.

RESEARCH QUESTIONNAIRE

You have now received an explanation as to the purpose of this questionnaire. We would like to remind you again that your answers will be strictly confidential. In fact, your name is not associated with the analysis, we only use a number that has been assigned to you at the beginning of this study. Therefore, we ask you to be completely frank and honest. Please give all questions your close attention and do not skip any questions. Thank you very much for your cooperation.

14. Most of us, at some time or another, have found it necessary to break the rules which are established either by law, by our parents, by our teachers, or by our friends. (For example, there is evidence that many people are engaging in the following types of behavior -- falsifying income tax reports, exceeding speed limits, drinking when under age, premarital sex relations, etc.) We are interested in determining how you would act in a given situation under differing conditions. Put yourself in the following position:

It means a great deal to you to be able to stay in school and you really need a good grade in a particular course. You are now taking the first exam and have no idea what grade you are going to get. You also understand that cheating is against the rules of the university. We are interested in learning how far you will exceed the limits of this rule under the following circumstances:

1. First, assume that no one except yourself will ever know what you are going to do in order to get a good grade on this exam. Place a check (✓) below each of the following that you would do; remember, you are not being judged. We are after the truth.

STUDY
HARD AND
HOPE FOR
THE BEST

THINK A-
BOUT CHE-
ATING BUT
NOT ACTU-
ALLY DO
IT

CHECK
YOUR
NEIGHBORS
PAPER A-
BOUT ANS-
WERS YOU
ARE NOT
SURE OF

BRING
CONCEALED
NOTES IN-
TO THE
CLASS

IF ALLOW-
ED TO
GRADE
YOUR TEST
TO IM-
PROVE
YOUR
SCORE

STEAL AN
EXAM BE-
FORE THE
TEST, IF
YOU HAD A
CHANCE

2. Now, only you and your best friends will ever know of your behavior. (Again, place a check () in the blanks that apply to you.)

3. Now, only you and your parents will ever know of your behavior. (Again, check the blanks that apply to you.)

4. Now, only you and the teacher will ever know of your behavior. (Again, check the blanks that apply to you.)

Below are six different methods that can be used by students in trying to get a good grade on an exam.

15.

- I. Rank each of the six types of behavior according to how wrong you feel they are:
- Place one of the following choices in the blanks preceding each box...
- | | | |
|--------------------|-----|--|
| a. NOT WRONG | (1) | STUDY HARD AND HOPE FOR THE BEST |
| b. MILDLY WRONG | (2) | THINK ABOUT CHEATING BUT NOT ACTUALLY DO IT |
| c. QUITE WRONG | (3) | CHECK YOUR NEIGHBORS PAPER ABOUT ANSWERS YOU ARE NOT SURE OF |
| d. EXTREMELY WRONG | (4) | BRING CONCEALED NOTES INTO THE CLASS |
| | (5) | IF ALLOWED TO GRADE YOUR TEST, TO "IMPROVE" YOUR SCORE |
| | (6) | STEAL AN EXAM BEFORE THE TEST, IF YOU HAD A CHANCE |

16.

- II. Now, which types of behavior in the boxes above do you feel are as wrong as taking money from a friend without telling him (her).

CIRCLE THOSE NUMBERS THAT YOU FEEL ARE AS WRONG AS TAKING MONEY FROM A FRIEND...

- | | |
|-----|-----|
| (1) | (4) |
| (2) | (5) |
| (3) | (6) |

Now, we would like to get some of your reactions to this course. Check the blanks that indicate the way you feel about each of the following items.

17. Would you say that this course is ____

- ____ a. Excellent
- ____ b. Good
- ____ c. Fair
- ____ d. Bad

18. Place one of the following numbers next to each of the statements below according to how you agree or do not agree with it:

1. Agree very much
2. Agree, but only slightly
3. Do not really agree
4. Do not agree at all

- ____ a. I really do not care about learning the subject matter of this course; I just want to get a good grade.
- ____ b. If rules and regulations interfere with the goals I have set for myself, then I would probably have to break these rules.
- ____ c. The last test was really not a good measure of how well I knew the subject matter.
- ____ d. The instructor in this course really doesn't seem to care how I get my grade.
- ____ e. Tests are so hard and the emphasis on grades is so great, that sometimes it doesn't seem to matter how one gets a grade.
- ____ f. It is all right to report an answer as correct when one really knows the right answer, but actually checked a wrong one.

19. Use the choices given below as they apply to your reasons for taking Sociology I.

1. Applies very much
2. Applies, but only slightly
3. Does not really apply
4. Does not apply at all

- a. A genuine interest in sociology
- b. To satisfy a university requirement
- c. It fit into my schedule
- d. To broaden my intellectual horizons
-

20. As a teacher, would you say that the instructor in this course is

- a. Excellent
- b. Good
- c. Fair
- d. Bad

21. The instructor in this course probably would not report someone for cheating; he seems too easy going.

- a. Agree very much
- b. Agree, but only slightly
- c. Do not really agree
- d. Do not agree at all

22. Just before you were asked to turn in your examination score, what did you think your chances for success were, if you falsified your score?

- a. Very high likelihood
- b. Probably would succeed
- c. Little chance of succeeding
- d. Had no such thoughts

23. What is your estimate of the percentage of the class that reported a false score on the last exam?

- a. Over 75%
- b. 50% to 75%
- c. 25% to 50%
- d. Under 25%

24. Rate the relative ease of cheating in this class as compared with other classes you are taking.

- a. Much easier in this class
- b. Slightly easier in this class
- c. Little if any difference among classes
- d. Harder in this class

25. Now we would like to know how you feel the attitudes and ideas expressed in your answers to this questionnaire compare with the ideas and attitudes held on the same subjects by:

(Please check the appropriate box)

Exactly	Largely	Different	Completely
the same	the same	from	different
as yours	as yours	yours	from yours

Your church.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your parents.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your teachers.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your fellow students..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. NOW, ONE LAST QUESTION. What were your reasons for cheating on the last exam. If you did not cheat, then we would like to know your reasons for not cheating. Write your answers in the space below.

THANK YOU VERY MUCH FOR YOUR HELP!

Name _____

This brief survey concludes the study of cheating. Please give each question your close attention and answer all questions.

27. In preparing for the first test, check each of the following which you did:

- a. Joined in a study group with other students
 b. Relied on last minute studying or cramming almost entirely
 c. Used notes of students who had previously taken the course
 d. Used copies of old tests and exams in this course
 e. Spent more time in preparation than most other students
 f. Felt anxious and nervous about how well you would do

28. Rank the following in order of importance for doing well on tests and exams in this course.

- Memory
 Logical methodical thinking
 Diligence and preparation
 Shrewdness in doping out what the teacher wants

29. If you had cheated in a course, and the following individuals told you they know you had cheated, what would you feel?

	Shame	Embarr- assment	No Reaction	Satis- faction
A close friend....	_____	_____	_____	_____
A faculty member..	_____	_____	_____	_____
Your parents.....	_____	_____	_____	_____

30. On the basis of your experience on campus and the cases of cheating and plagiarism you are familiar with, give a rough estimate of the following percentages:

For the student body as a whole, estimate roughly what percentage:

Have cheated since coming to college	_____	%
Have not cheated since coming to college	_____	%
	<u>100</u>	%

31. What would you say is the primary feeling of the student body toward cheating?

- ___ a. Extremely strong feeling of disapproval
- ___ b. Strong feeling of disapproval
- ___ c. Mild feeling of disapproval
- ___ d. Probably no strong reaction one way or the other

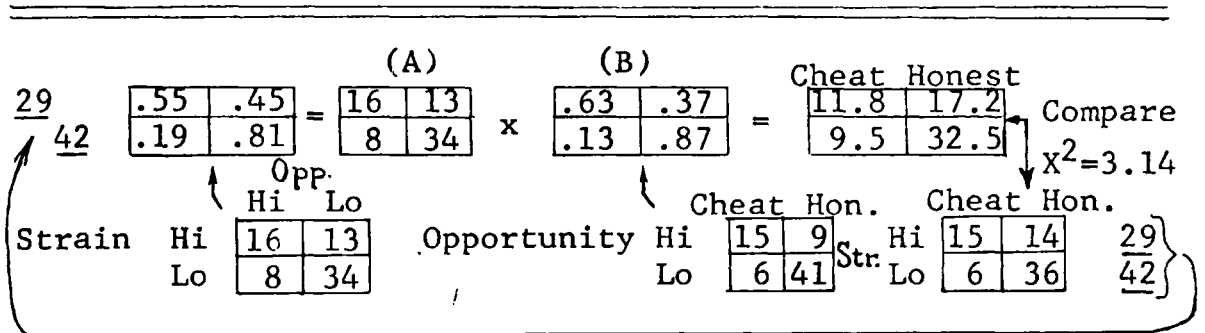
Appendix B

A Methodological Explanation of the Sequential Model (with Results When the Single Strongest Indicator Is Used) and the Coleman Model

The Sequential Model. Suppose one wishes to show a sequence beginning with high strain, then including a high perception of opportunity to succeed at cheating, and finally cheating:

Illustration 6.1

The Sequential Model



Hypothesis: Strain → Opportunity → Cheating

The horizontal marginals taken from the actual relationship of strain with cheating (29 and 42) start the process at the upper left. The first lower box (actual relationship of strain with opportunity) is used to generate expected frequencies shown in the box directly above it, again with the horizontal marginals. By multiplying these

two one arrives at Box A. The effect of opportunity on cheating is now introduced, Box B, and the multiplication of A X B gives the expected distribution generated by this model. When comparing this distribution with the actual strain-cheating distribution one would hope for similarity. A very brief examination indicates that by introducing opportunity, three cheaters have been lost from the upper left cell (the students most expected to cheat) and three honest people from the lower right cell (the students least expected to cheat). The value, then, of introducing opportunity as a variable to increase the predictive power of cheating will have to be weighed against the number of cases lost in the principle diagonal. Results when using the strongest indicators of the four independent variables in any order and in any combination of two or more are presented in Table 6.1.

Table 6.1

All Possible Sequences Using the Strongest^a
indicator for each Independent Variable

Sequences	Chi-Square Model to Actual	Chi-Square Actual to Expected	Per Cent of Total Explained by Model ^b
1. OPP-STR-CHT ^c	8.90	18.87	29.6
2. STR-OPP-CHT	3.14	11.54	49.7 ^d

Sequences	Chi-Square Model to Actual	Chi-Square Actual to Expected	Per Cent of Total Expla- ined by Model ^b
3. OPP-RAT-CHT	12.69	18.87	16.7
4. RAT-OPP-CHT	3.06	8.23	40.4*
5. OPP-CON-CHT	13.77	18.87	14.3
6. CON-OPP-CHT	.94	4.46	58.4*
7. STR-RAT-CHT	6.15	11.54	25.2
8. RAT-STR-CHT	3.31	8.23	35.8*
9. STR-CON-CHT	8.41	11.54	15.7
10. CON-STR-CHT	1.85	4.46	36.0*
11. RAT-CON-CHT	5.08	8.23	22.9
12. CON-RAT-CHT	1.79	4.46	38.2*
13. OPP-STR-RAT-CHT	16.08	18.87	06.7
14. OPP-RAT-STR-CHT	16.57	18.87	05.1
15. STR-RAT-OPP-CHT	9.72	11.54	08.1
16. STR-RAT-OPP-CHT	9.29	11.54	11.1
17. RAT-STR-OPP-CHT	5.41	8.23	18.8*
18. RAT-OPP-STR-CHT	6.38	8.23	11.8
19. OPP-STR-CON-CHT	16.99	18.87	05.6
20. OPP-CON-STR-CHT	16.98	18.87	04.1
21. STR-OPP-CON-CHT	9.68	11.54	08.4
22. STR-CON-OPP-CHT	9.71	11.54	09.5
23. CON-STR-OPP-CHT	3.06	4.46	20.0*
24. CON-OPP-STR-CHT	3.13	4.46	17.0
25. OPP-RAT-CON-CHT	17.27	18.87	04.6
26. OPP-CON-RAT-CHT	16.80	18.87	04.9
27. RAT-OPP-CON-CHT	7.33	8.23	07.6
28. RAT-CON-OPP-CHT	6.37	8.23	13.7
29. CON-OPP-RAT-CHT	3.82	4.46	09.6
30. CON-RAT-OPP-CHT	3.27	4.46	17.5*
31. STR-RAT-CON-CHT	10.22	11.54	06.9
32. STR-CON-RAT-CHT	10.32	11.54	03.1
33. RAT-STR-CON-CHT	7.33	8.23	07.6
34. RAT-CON-STR-CHT	7.02	8.23	06.5
35. CON-RAT-STR-CHT	3.42	4.46	10.8*
36. CON-STR-RAT-CHT	3.77	4.46	07.9
37. OPP-STR-RAT-CON-CHT	18.12	18.87	02.4
38. OPP-STR-CON-RAT-CHT	18.19	18.87	01.6
39. OPP-RAT-STR-CON-CHT	18.37	18.87	02.2
40. OPP-RAT-CON-STR-CHT	18.42	18.87	00.5
41. OPP-CON-RAT-STR-CHT	18.23	18.87	08.9

Table 6.1 Continued.

42.	OPP-CON-STR-RAT-CHT	18.40	18.87	08.9
43.	STR-OPP-RAT-CON-CHT	10.88	11.54	03.1
44.	STR-OPP-CON-RAT-CHT	10.99	11.54	02.3
45.	STR-RAT-OPP-CON-CHT	11.15	11.54	03.4
46.	STR-RAT-CON-OPP-CHT	10.76	11.54	04.7
47.	STR-CON-OPP-RAT-CHT	11.25	11.54	01.6
48.	STR-CON-RAT-OPP-CHT	11.00	11.54	03.3
49.	RAT-OPP-STR-CON-CHT	7.90	8.23	04.1
50.	RAT-OPP-CON-STR-CHT	7.94	8.23	00.9
51.	RAT-STR-OPP-CON-CHT	7.78	8.23	04.8
52.	RAT-STR-CON-OPP-CHT	7.72	8.23	05.2
53.	RAT-CON-OPP-STR-CHT	7.65	8.23	03.9
54.	RAT-CON-STR-OPP-CHT	7.61	8.23	04.6
55.	CON-OPP-STR-RAT-CHT	3.76	4.46	07.9
56.	CON-OPP-RAT-STR-CHT	4.21	4.46	01.2
57.	CON-STR-OPP-RAT-CHT	4.47	4.46	03.4
58.	CON-STR-RAT-OPP-CHT	4.35	4.46	20.0
59.	CON-RAT-STR-OPP-CHT	4.30	4.46	04.4
60.	CON-RAT-OPP-STR-CHT	4.09	4.46	04.9

^aThe strength of association of the indicators with cheating were as follows: constraint, $\gamma=.522$; rationalization, $\gamma=.647$; strain, $\gamma=.724$; and opportunity, $\gamma=.839$.

^bTotal explained by the model is determined by the following formula:
$$\frac{\text{predicted cell frequency} - \text{expected cell frequency}}{\text{actual cell frequency} - \text{expected cell frequency}}$$

Predicted frequency is that generated by the model and expected frequency is that which would exist under independence.

^cAbbreviations stand for the four independent variables; CON=constraint, RAT=rationalization; STR=strain; and OPP=opportunity. CHT stands for cheating.

^dThe lines separate the different indicators being used, i.e. the first group contains the indicators for opportunity and strain; group 13 to 18 contain the indicators for opportunity, strain, and rationalization. The asterisk indicates the best model using a given group of variables.

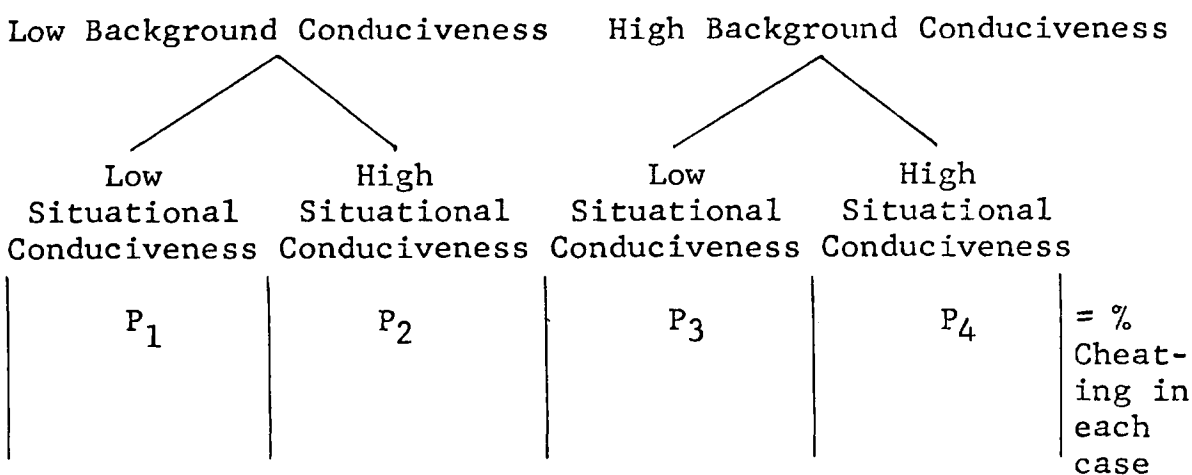
In every instance through the first 36 chains the best sequence is where a weaker indicator (less of an association with cheating) precede a stronger indicator. (The indicators from weakest to strongest in association with cheating are constraint, rationalization, strain, and opportunity.) The best model, then, is where constraint precede opportunity. This characteristic of the model should be kept in mind when any conclusions are drawn. Whether this characteristic is due to the strength of association of the indicators with cheating, as seems to be indicated here, or to particular inter-action effects of the indicators in question cannot be determined, but to avoid errors in the use of this model, it is strongly recommended to have several indicators of a given variable to make sure that variable is being properly represented by the data. When this is done, there exists a stronger basis to conclude that an hypothesized causal sequence does exist rather than that the model is merely a function of the choice of indicators.

The Coleman Model. Additional support for an hypothesized sequential chain can be gained by using Coleman's model. Suppose strain and constraint are combined into a

background variable and opportunity and rationalization are combined into a situational variable. These two independent variables can now be dichotomized on the basis of high and low conduciveness to cheating.

Illustration 6.2

Coleman's Model



By subtracting P₃ from P₄ and P₁ from P₂, adding the results and dividing by two, the effects of the situation while controlling for the societal effects can be seen. By subtracting P₂ from P₄ and P₁ from P₃, adding the results and dividing by two, the effects of society while controlling for situation can be seen.

Appendix C

DISTRIBUTION OF CHEATERS, BORDERLINES, AND
NONCHEATERS BY EACH ITEM ON THE QUESTION-
NAIRE (GROUPED BY VARIABLES BEING TESTED)

General Information
(Given in %)

Item number on ques- tionnaire, with des- cription		Cheaters (N=21) ^b	Border- lines (N=11) ^b	Non- Cheaters (N=50) ^b	Total % (N) ^c
1. ^a Residency & campus activi- ties	a. Live campus	27	10	63	100(30)
	b. Live home	24	17	60	101(42)
	c. Elsewhere	44	11	44	99 (9)
	d. Greek	35	0	65	100(23)
	e. Officer	67	33	0	100(31)
	f. Work	23	23	55	101(31)
	g. Activities	30	14	57	101(37)
2. Size of commu- nity raised in	a. 200,000+	29	18	53	100(45)
	b. 10,000+	23	6	73	102(22)
	c. -10,000	18	9	73	100(11)
	d. a farm	33	33	33	99 (3)
3. Parent's educa- tion	Father:				
	a. Some grade	0	33	67	100 (3)
	b. Grade	50	25	25	100 (8)
	c. Some h.s.	14	14	71	99 (7)
	d. High school	19	13	69	101(16)
	e. Some college	31	13	56	100(16)
	f. College	26	10	65	101(31)
	Mother:				
	a. Some grade	0	33	67	100 (3)
	b. Grade	0	0	100	100 (4)
	c. Some h.s	29	14	57	100 (7)
	d. High school	23	15	62	100(26)
e. Some college	29	17	54	100(24)	
f. College	33	6	61	100(18)	

Item number on question- naire, with description		Cheaters (N=21)	Border- lines (N=11)	Non- Cheaters (N=50)	Total % (N)
4. Family income	a. -\$5,880	29	29	43	101 (7)
	b. \$5,000+	19	13	68	100(31)
	c. \$10,000+	22	17	61	100(18)
	d. \$15,000+	36	8	56	100(25)
Strain (Given in %)					
25. Diver- gency of views from sig- nificant others	a. Above mean	45	12	42	99(33)
	b. Below mean	12	14	73	99(49)
	$\chi^2=11.544^d$				
8. Impor- tance of grades $\chi^2=5.864$	a. Very imp.	12	15	74	101(34)
	b. Important	31	14	55	100(42)
	c. Not very	67	0	33	100 (6)
	d. Not imp.	0	0	0	0 (0)
6. Grade point average	a. Above mean	19	14	68	101(37)
	b. Below mean (mean=2.92)	34	17	49	100(35)
9. Impor- tance of parent's desire for you to succeed	a. Very imp.	23	15	62	100(47)
	b. Important	31	22	58	101(26)
	c. Not very	20	20	60	100 (5)
	d. Not imp.	50	0	50	100 (2)
11. Srole's anomia scale	a. Above mean	27	9	65	101(34)
	b. Below mean	26	15	60	101(47)

(The following five items have to do with the student's orientation to college and have been included under strain on the hypothesis that certain views will affect cheating.)

Item number on question- naire, with description		Cheaters (N=21)	Border- lines (N=11)	Non- Cheaters (N=50)	Total % (N)
12. Academic items 1, 4,7,10, and 13	a. Above mean	18	13	68	99(38)
	b. Below mean	30	14	56	100(43)
12. Social items 2, 5,8,11, and 14	a. Above mean	28	13	60	99(40)
	b. Below mean	23	13	64	100(39)
12. Voca- tional items 3, 6,9,12, and 15	a. Above mean	24	15	61	100(41)
	b. Below mean	25	13	63	101(40)
13. Academic items a, b, & c	a. Above mean	17	8	75	100(34)
	b. Below mean	32	16	52	100(44)
13. Social items d, e, & f	a. Above mean	31	13	56	100(48)
	b. Below mean	16	13	72	101(32)
Constraint (Given in %)					
10. Crissman scale $X^2=4.458$	a. Above mean	14	19	67	100(42)
	b. Below mean	38	8	55	101(40)
5. Religious preference	a. Protestant	23	11	66	100(47)
	b. Catholic	38	10	52	100(21)
	c. Jewish	0	67	33	100 (3)
	d. Other	29	14	57	100 (7)
	e. None	0	25	75	100 (4)
6. Church atten- dance	a. Weekly	23	8	69	100(26)
	b. Often	56	19	25	100(16)
	c. Seldom	17	17	67	101(36)
	d. Never	0	0	100	100 (4)

Item number on question- naire, with description		Cheaters (N=21)	Border- lines (N=11)	Non- Cheaters (N=50)	Total % (N)
7. Relations with par- ents	a. Very close	24	24	52	100(29)
	b. Close	28	11	61	100(36)
	c. Not close	21	0	79	100(14)
	d. Very poor	0	0	100	100 (2)
Opportunity (Given in %)					
23. Estimate % class that cheated $\chi^2=18.866$	a. 75+	0	0	0	0 (0)
	b. 50-75	75	12	12	99 (8)
	c. 25-50	53	0	47	100(17)
	d. <25	11	18	72	101(57)
22. Perceived likelihood of success $\chi^2=8.290$	a. Very high	50	0	50	100 (4)
	b. Probably	53	13	33	99(15)
	c. Little chance	25	15	60	100(20)
	d. No thoughts	15	15	70	100(40)
24. Perceived ease of cheating among classes	a. Easier here	40	0	60	100 (5)
	b. Slightly easier	13	13	75	101 (8)
	c. Little dif.	29	10	62	101(52)
	d. Harder here	29	14	57	100 (7)
21. Doubt teacher would take action	a. Agree	60	0	40	100 (5)
	b. Agree slightly	0	19	81	100(16)
	c. Not really	33	13	53	99(45)
	d. Not agree	21	14	64	99(14)
Rationalization (Given in %)					
18. Six items on ration- alization	(a) 1. Agree v.m.	0	0	100	100 (3)
	2. Agree slt.	31	0	69	100(13)
	3. Not really	32	15	53	100(34)
	4. Not agree	19	19	63	101(32)

Item number on question- naire, with description	Cheaters (N=21)	Border- lines (N=11)	Non- Cheaters (N=50)	Total % (N)	
18. Six items (b) 1. Agree v.m. on ration- 2. Agree slt. alization 3. Not really 4. Not agree	0	0	100	100 (4)	
	35	0	65	100(17)	
	33	15	53	100(33)	
	15	22	63	100(27)	
	(c) 1. " "	25	20	55	100(20)
	2.	27	9	64	100(22)
	3.	28	16	56	100(25)
	4.	21	7	71	99(14)
	(d) 1. " "	0	0	0	0 (0)
	2.	43	0	57	100 (7)
	3.	22	16	63	101(32)
	4.	27	15	59	101(41)
	$x^2=8.229$ (e) 1. " "	50	0	50	100 (6)
	2.	42	12	46	100(26)
	3.	18	18	64	100(22)
	4.	11	14	75	100(28)
$x^2=7.879$ (f) 1. " "	0	0	0	0 (0)	
2.	64	9	27	100(11)	
3.	29	24	48	101(21)	
4.	16	10	73	99(49)	
19. Why I (a) 1. Applies v.m. took 2. Applies slight. this 3. Not really app. course 4. Not apply	20	13	67	100(30)	
	32	16	52	100(25)	
	36	21	43	100(14)	
	17	0	83	100 (6)	
	(b) 1. " "	24	14	62	100(42)
	2.	20	16	64	100(25)
	3.	67	0	33	100 (3)
	4.	25	0	75	100 (4)
	(c) 1. " "	13	25	63	101 (8)
	2.	18	27	55	100(11)
	3.	38	13	50	101(16)
	4.	25	8	67	100(36)

Item number on question- naire, with description		Cheaters (N=21)	Border- lines (N=11)	Non- Cheaters (N=50)	Total % (N)
19. Why I (d) took this course	1. Applies v.m.	27	18	55	100(22)
	2. Applies slgt.	22	14	64	100(36)
	3. Not really	50	0	50	100 (8)
	4. Not apply	20	20	60	100 (5)
17. Rate this course	a. Excellent	43	0	57	100 (7)
	b. Good	24	13	62	99(45)
	c. Fair	25	18	57	100(28)
	d. Bad	0	0	100	100 (1)

How Cheating Defined
(Given in %)

14. How presence of others affects behavior, by differ- ent types of cheat- ing	(1)	a. Study & hope	26	13	61	100(82)
		b. Think of it	32	12	56	100(57)
		c. Look others	50	13	38	101(32)
		d. Bring cribs	69	6	25	100(16)
		e. Change score	73	7	20	100(15)
		f. Steal exam	0	33	67	100 (3)
(2)	a. " "	26	13	61	100(82)	
	b.	27	11	61	99(44)	
	c.	35	6	59	100(13)	
	d.	56	0	44	100 (9)	
	e.	63	0	38	101 (8)	
	f.	0	0	100	100 (2)	
(3)	a. " "	26	13	61	100(82)	
	b.	26	11	63	100(27)	
	c.	40	0	60	100 (5)	
	d.	50	0	50	100 (2)	
	e.	50	0	50	100 (2)	
	f.	0	0	0	0 (0)	
(4)	a. " "	26	13	61	100(82)	
	b.	28	6	67	101(18)	
	c.	50	0	50	100 (2)	
	d.	100	0	0	100 (1)	
	e.	100	0	0	100 (1)	
	f.	0	0	0	0 (0)	

Item number on question- naire, with description		Cheaters (N=21)	Border- lines (N=11)	Non- Cheaters (N=50)	Total % (N)
15. Rate the six types of behav- ior	(1) a. Not wrong	26	13	61	100(82)
	b. Mildly wr.	0	0	0	0 (0)
	c. Quite wr.	0	0	0	0 (0)
	d. Extremely	0	0	0	0 (0)
	(2) a. " "	28	11	62	101(47)
	b. " "	21	15	64	100(33)
	c. " "	50	50	0	100 (2)
	d. " "	0	0	0	0 (0)
	(3) a. " "	0	0	0	0 (0)
	b. " "	35	15	50	100(26)
	c. " "	28	10	62	100(39)
	d. " "	6	18	76	100(17)
	(4) a. " "	0	0	0	0 (0)
	b. " "	17	50	33	100 (6)
	c. " "	20	20	60	100(30)
	d. " "	30	4	65	99(46)
	(5) a. " "	0	0	0	0 (0)
	b. " "	55	0	45	100(11)
	c. " "	30	22	47	101(37)
	d. " "	12	9	79	100(34)
	(6) a. " "	0	0	0	0 (0)
	b. " "	0	100	0	100 (1)
	c. " "	60	0	40	100 (5)
	d. " "	24	13	63	100(76)

Item number on question- naire, with description		Cheaters (N=21)	Border- lines (N=11)	Non- Cheaters (N=50)	Total % (N)
16.	Which of	0	0	0	0 (0)
	the six	0	50	50	100 (2)
	types as	17	17	66	100(36)
	bad as	28	14	58	100(57)
	stealing	13	15	72	100(46)
		23	15	62	100(65)

- a. Numbers correspond to numbering used in questionnaire.
- b. The total N of 82 varies slightly due to questions left unanswered. At no time is this greater than three, except for grade point average where information was not available for 10 students.
- c. In cases where an item totals to 100%, there may be minor variations due to rounding.
- d. Chi squares are given where calculated relationships with cheating are significant at the .05 level.

Appendix D

Comments By the Sample to the Question of Why you Did or Did Not Cheat (Paraphrased).

Borderline Cases:

1. The pressure to pass makes many cheat.
2. I am afraid of being caught. If I get a bad grade I deserve it.
3. I do not want to spoil my record of honesty.
4. The grades I earn are my own.
5. I have always been taught that dishonesty is wrong.
- * 6. I never got bad grades before; I felt I had let people down.
7. I suspected something.
8. It is bad on one's conscience. If I take a course I plan to learn it.
9. It is a moral sin.
10. Our family doesn't advocate it. Also, I like a clear conscience.
11. I would rather rely on my own ability.

Cheaters:

- * 1. It would bother me to cheat--I changed one (difference indicates he changed 5) but didn't want to.
2. It never pays off, and you are in college to learn.
3. There is too much emphasis on high grades. Also, it is usually found out.
- * 4. The temptation was too great.
- * 5. I must pass all my subjects.
- * 6. I really knew the material; I was discouraged because I had missed so many.
7. This subject claims to have made errors in grading (the score she reported was 6 points better than her actual grade).
- * 8. There is a pressure to get good grades; when the situation is there, I take advantage of it.
- * 9. I wanted and needed a higher grade.
- * 10. My grade wasn't good and I thought I could get away with it.

- *11. Many were doing it and I had to protect my grade.
- *12. Many were cheating, I had to keep myself on an even par.
- *13. I panicked...things are so competitive.
- *14. I didn't stop to think it out.
- *15. I knew I was capable of doing better; I rationalized to make it seem right.
- 16. I was brought up in a parochial school. Also, I didn't see any sense in cheating.
- 17. One has to be satisfied within himself in order to succeed.
- *18. I guess I wanted a better grade more than I wanted to keep my pride.
- *19. Altering by 1 or 2 points is more like a "white lie". I felt a large percentage of the class was doing the same thing.
- *20. I did it to get a good grade and graduate in high standing.
- 21. This subject left the space blank.

Honest:

- 1. I spend many hours studying and I don't have to rely on cheating.
- 2. It seemed too easy. College means too much to take the chance.
- 3. I felt I was being trusted in and I didn't want to break that trust.
- 4. I felt it was too easy. It's not the way I was brought up.
- 5. My parents and teachers have drummed it into me not to cheat.
- 6. Religious reasons--"It is right to do right".
- 7. I thought it would be wrong.
- 8. You are only cheating yourself.
- 9. My conscience would bother me. There is nothing I dislike more than a cheater.
- 10. I like to make it through on my own merits.
- 11. The risk is too great.
- 12. I thought it was an experiment. I like to feel proud if I get a good grade.
- 13. My knowledge of the subject matter is above average. I can only take pride in earned grades.

14. It would rob me of personal satisfaction; I'm in college to learn.
15. I have been brought up to believe that it only hurts yourself.
16. There is a personal satisfaction one gets from not cheating.
17. It would be hard on my conscience.
18. My conscience would have bothered me.
19. I suspected something, and besides, a few extra points would not have helped me.
20. Cheating shows lack of responsibility; to see people cheat makes me sick.
21. I got caught a couple of times and it embarrassed the hell out of me.
22. I have a conscience. If I can't get good grades I should not be here.
23. It is a sign of immaturity. I'm not here to be graded but to learn.
24. I like to know that grades are representative of what I've learned. Sometimes I get in a "what to hell mood" and do cheat.
25. It's wonderful to be able to trust people.
26. I suspected something. I have cheated and realized it gains nothing.
27. It can become a habitual thing.
28. It seemed that the chance of getting caught was too great.
29. I want to learn the course, not just pass it by cheating.
30. I usually get good grades. I haven't cheated for several years, I even cover my paper to keep others from copying.
31. I checked answers with the person next to me on ones I wasn't sure of.
32. I have to remain loyal to myself, my parents, and those who have faith in me.
33. My parents have placed a high value on honesty.
34. A student is more individually involved in taking a test in college.
35. You should only get credit for your own work.
36. I did the best I could and there wasn't any use changing answers.
37. It's a responsibility to myself not to cheat.

38. It didn't seem right to change my grade, but I don't feel wrong about looking at my neighbor's paper.
39. Cheating is an excuse not to learn.
40. I gain satisfaction from doing well on an exam.
41. If I do badly, it's better to study harder the next time rather than to cheat.
42. I was afraid of getting caught, besides, too much is at stake.
43. I looked at other's papers but I did not change my score.
44. I wouldn't want to downgrade my self image. Also, I would be scared to death of being caught.
45. I thought about it, but I didn't.
46. I did well enough on the exam so I didn't have to think of cheating.
47. I would only be cheating myself.
48. I feel twice as good if I get a grade I earn.
49. I just don't believe in it, those that do, don't get ahead, they just fall further behind.
50. It's morally wrong--though I have cheated before.

*This indicates that the subject is confessing to the cheating.

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