THE RELATIONSHIP AMONG STATUS CHARACTERISTICS, PERFORMANCE EXPECTATIONS, PROCEDURAL EXPECTATIONS, AND VIOLATIONS OF PROCEDURAL EXPECTATIONS

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ABSTRACT

THE RELATIONSHIP AMONG STATUS CHARACTERISTICS,
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EXPECTATIONS, AND VIOLATIONS OF
PROCEDURAL EXPECTATIONS

By

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The work described here is heavily influenced by the Expectation Theory of Joseph Berger and associates and by Harold Garfinkel's and Peter McHugh's ethnomethodological research on expectation violations.

The influence of the Berger group (1966) revolves around their conceptions of performance expectations, external status characteristic, status characteristic, and diffuse status characteristic. In a task situation where person (P) and other (0) are committed to "successful" completion of the task, it is assumed that the actors will feel pressured to determine their relative abilities at the task. These beliefs concerning relative task ability are labeled performance expectations. If P and O differ in an external status characteristic (such as profession or sex), and if these criteria are not directly relevant to the task, but if there are no other available criteria for determining their differential expertise at the task, then beliefs associated with the status characteristic will become the basis for assignment of performance expectations.

A status characteristic stands for an evaluation by an actor that he or she is "better" or "worse" than another actor. However, there are apparently two kinds of evaluations: specific and general or diffuse. First, judgments of specific abilities are concerned with evaluations that are made with respect to specific traits associated with the status characteristic; for example, professors are considered good writers. Second, these specific evaluations become generalized or diffuse; for example, a professor is considered not only a good writer (a specific evaluation), but also to be capable generally. The specific evaluations that become generalized or diffuse represent the abstract definition of a diffuse status characteristic. Because it is assumed that status characteristics determine the assignment of performance expectations, and because it is assumed that performance expectations determine the observable power and prestige order of the group, the initial status differences between P and O should come to correspond to the differences in power and prestige between them.

In addition to extending the theory of Berger and associates, this work investigates a new aspect, namely, assumptions about violations of <u>procedural</u> or <u>normative expectations</u>. The latter are defined as the beliefs that P and O have for self and each other in terms of their following the task rules. The theory posits that performance and normative expectations are related, and are related in degree: The higher the performance expectations that P holds for O, the higher the normative expectations that P holds for O.

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The theory also predicts that when a high status 0 breaks the normative order, a lower status P will respond later, registering fewer occurrences, and less positively to the violation than will a P of higher status interacting under the same conditions with a lower status 0.

The other major influence on this work derives primarily from the research of Garfinkel and McHugh on the topic of violations of procedural expectations. However, their efforts lack precision of conceptualization and testable derivations, and an attempt to avoid these shortcomings was made here.

In order to test the derivations of the theory, a laboratory test was designed and executed. The two independent variables were the high or low performance expectations that the subjects held for their opponent, and the procedural expectations that were violated. The two dependent variables were the subjects' responses to violations, and their feelings toward their opponent. Fifty subjects were run in the experiment, 27 assigned randomly to one condition and 23 assigned randomly to the other. Ten subjects were excluded from the analysis since they did not meet the scope conditions of the theory, leaving an n of 20 in each condition. At the beginning of the experiment, subjects were introduced either to a high (H-L) or low (L-H) status confederate. Their task was to play a word game with their opponent which included seven critical trials. These latter were defined as those in which a procedural violation occurred. The proportion of times the subjects in each condition detected and/or scored a violation

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was considered a measure of their acceptance or rejection of the other's performance outputs.

After the experiment, subjects were administered an adjective test. The proportion of times that subjects responded favorably or negatively toward the opponent, in each condition, was considered a measure of their feelings toward their opponent.

The data demonstrate that the derived predictions tend in the directions expected. Subjects in the L-H condition responded to violations later during the sequence of trials and fewer times, and they felt less positively toward the other than did subjects in the H-L condition.

In addition to the data relating to the major tests of the theory, also discussed are serendipitous findings, interpretations of some unexpected data, evaluation of the experimental setting, and suggestions for future changes in the experimental design and extensions of the theory.

The data appear to support the theoretical assertions made here. In general, the derived predictions basically were confirmed in terms of the expected differences between conditions. The following conclusions seem justified:

- (1) The differential performance and procedural expectations that P holds for P' (self) and O seem to produce an observable behavioral difference; and
- (2) the differences between the conditions in terms of reactions to violations of normative expectations are substantial and in the predicted direction.

THE RELATIONSHIP AMONG STATUS CHARACTERISTICS, PERFORMANCE EXPECTATIONS, PROCEDURAL EXPECTATIONS, AND VIOLATIONS OF PROCEDURAL EXPECTATIONS

Ву

Lynn M. Brody

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CHAPTER I

INTRODUCTION TO THE PROBLEM AND OVERVIEW OF CHAPTER

INTRODUCTION

In many relationships between people there will be a system of expectations defining what constitutes appropriate and/or inappropriate behavior for each person. Behavior most likely is defined by the interactants as either conforming to or deviating from these expectations. This study attempts to formulate a theory and test empirically some of the derivations from the theory concerning reactions to deviations from expectations. More specifically, the theory centers on reactions to violations of procedural expectations.

Procedural expectations are beliefs that an actor holds for another actor concerning "proper" behavior in a situation. If, for example, two people are playing a game, neither will expect the other nor himself to "cheat." However, if "cheating" or some violation of a procedural expectation does occur, the crucial questions are: Given a violation of a procedural expectation, what reactions will be engendered, and will the reactions be dependent upon specific characteristics of the relationship between the actors? With respect to the latter, one may ask whether the relative status of the actors is related to their reactions to violations of procedural expectations.

The activation or situational dependence of expectations being defined as appropriate or inappropriate would be an interesting theoretical issue to pursue in the future.

The basis of an answer to these questions can be developed from two relatively recent lines of thought. The first of these is the Ethnomethodological School, in particular the work of Harold Garfinkel and Peter McHugh on violations of procedural or constitutive expectations. Their basic premise is that there are procedural rules which define proper situational behavior; although universal and unstated, these rules are recognized by each person, and he expects himself and those with whom he interacts to abide by them. When expectations are violated, confusion and the necessity to redefine the situation will result. Although the Ethnomethodological School encompasses the work of several people as well as Garfinkel and McHugh, throughout this study the term will be used solely in reference to the work of these two writers.

The second source from which this study derives, Expectation Theory, deals with status relations and the interaction between individuals. Formally developed by Joseph Berger and his associates, this theory makes several assumptions which are relevant here.

(1) When individuals of differing statuses are in a task situation, a need arises for them to evaluate their differential ability at the task. (2) The abilities usually are assigned according to beliefs that the individuals have about their differential statuses. Under certain circumstances, people will consider someone of higher status than themselves to be more competent at a task, although the other's status or expertise may be unrelated to task ability. (3) These initial evaluations will affect all future task interaction between the individuals.

Despite its significant contributions, Expectation Theory has not included conceptions of procedural expectations or violations of procedural expectations. The major argument of this work is that people form not only task ability but also procedural expectations of others, and these are related. The higher the task ability evaluation, the higher the procedural expectation; when the latter are violated, individuals will react differentially depending upon their initial ability evaluations.²

In summary, this work extends Expectation Theory by adding assumptions about reactions to violations of procedural expectations and adjoining them to conceptions of status characteristics. From this extension it will be possible to construct testable derivations.

PLAN OF STUDY

Chapter II presents in detail both the Ethnomethodological School's conceptions of violations of procedural expectations and Expectation Theory's theoretical structure. The chapter also briefly describes other relevant work. Suggestions gleaned from the literature analysis then are incorporated into the theory, which is presented in Chapter III.

²In the following work, procedural expectations are denoted as "high" or "low" and refer to evaluations made by actors concerning how demanding or exacting their procedural expectations are for another. For example, people of low status will have more demanding ("high") expectations concerning conformity to procedural rules for those of higher status than people of high status will have for people of lower status.

Chapter III states the formal assumptions and scope conditions of the theory, which is an extension of Expectation Theory. The theory presented here adds and defines the concepts of procedural expectations and reactions to violations thereof. Also included in Chapter III are the theoretical derivations which are to be tested in Chapter IV.

Chapter IV describes the empirical situation in which the derivations from the theory were tested. The initial design problems, the eventual design chosen, the physical setting, and the mechanical equipment used are discussed.

Chapter V reports the results of the study and analyzes the data. A discussion and interpretation of the empirical findings is included. The chapter also presents some suggestions for refinements of the experimental design as well as extensions of the theory.

Chapter VI contains a summary of the research, conclusions, and detailed recommendations for future changes in the experimental design and extensions of the theory.

CHAPTER II

ETHNOMETHODOLOGICAL PERSPECTIVE, EXPECTATION THEORY, AND SELECTED LITERATURE ON LATITUDE ALLOWED TO HIGH STATUS DEVIANTS

THE ETHNOMETHODOLOGICAL DISCOURSE

Some of the most heuristically valuable discussions of expectation violations come from Harold Garfinkel and Peter McHugh. Although the discourse is lacking in rigor and precision and the empirical research is not of a systematic nature, it offers substantial insights.

The Garfinkel Perspective

Garfinkel suggests that to understand order, one must produce disorder. His example of a stable situation (order), a game, is a very useful tool for recognition by self and others of the required behaviors for that game.

A game is selected because the basic rules of play serve each player as a scheme for recognizing and interpreting the other players "as well as his own behavioral displays as events of game conduct." The basic rules of a game define the situations and normal events of play for persons who seek to act in compliance with them (a player) (Garfinkel, 1963, p. 190).

According to Garfinkel, the rules of any game have three properties.

 From the standpoint of a player, out of alternative territories of play, numbers of players, sequences of moves, and the like, they frame a set that the player expects to choose regardless of his desires, circumstances, plans, interests, or consequences of choice either to himself or to others.

- 2. The player expects that the same set of required alternatives are binding upon the other player as are binding upon him.
- 3. The player expects that, as he expects the above of the other person, the other person expects it of him (Garfinkel, 1963, p. 190).

These three properties are labeled collectively as <u>constitutive</u> <u>expectancies</u>. Garfinkel suggests that there is a basic order in human behavior based on the "unstated terms of contract" which essentially results in consensus among people to follow the rules of the contract. Constitutive expectancies are present for each player, and it is only when the rules of the game are broken that people must reassess both their expectations for themselves and others and the rules by which they supposedly are playing. Garfinkel is trying to establish that there are empirical regularities respecting certain normative orders that are independent of a person's personal biography. The constitutive rules are so structured and so defined that any breach of them is called to the attention of the players immediately.

Being invariant to actual courses of game play, these expected uniformities serve as standards, i.e., as definitions of correct play. Thereby they serve as the basis for recognizing the strange move, the move that is "outside" of the game (Garfinkel, 1963, p. 194).

Garfinkel suggests that the rules of the game comprise the "constitutive order of events," and <u>trust</u> represents compliance to the order. For trust to occur, "the player takes for granted the

basic rules of the game as a definition of his situation, and that means of course as a definition of his relationships to others"

(Garfinkel, 1963, p. 194). Players must believe and expect that the basic rules of the game hold for themselves as well as the people with whom they are playing. The basic rules provide a player with a means of interpreting the appropriateness of a move or a behavior, both his own and the other player's. When a person has committed himself to following the basic rules and these are breached by another, the action becomes "senseless, i.e., it acquires the perceived properties of unpredictability, arbitrary occurrence, indeterminateness, lacking causal texture, means character, and moral necessity" (Garfinkel, 1963, p. 196). The player will become confused and therefore must reassess and redefine what constitutes social reality for this interaction, because he supposedly no longer has a frame of reference within which he can interpret the breach.

In summary, Garfinkel claims that there are basic expectations that people have of one another concerning "proper behavior"; although these are "unstated," they always are present. When these expectancies are broken, people become "confused" and search for a redefinition of the situation.

Ethnomethodological Research

Garfinkel has conducted various research projects on breaches of constitutive expectancies. Although these studies are interesting, one project in particular is most pertinent to the topic under

discussion. It was conducted both by Garfinkel (1962; 1967) and, later, McHugh (1968), and the "experiments" were so similar that they will be described as if they were one, although relevant differences will be noted. Subjects were recruited ostensibly to help determine whether there is a means of giving psychotherapy more simply than "the present time-consuming method." When S arrives he is told to think about a problem, give some background to it, and subsequently ask ten questions of a psychiatrist (in the Garfinkel study, a student counselor) that can be answered only by a "yes" or "no." The "psychiatrist" (E), who is in a separate room from S, gives his answers according to a predetermined sequence. After each answer from E, S shuts off the intercom so that E cannot hear his comments, and S records what he understands E to be telling him. After all ten questions are asked and answered, S summarizes what he has learned from the experience. In order to create disturbance, in the Garfinkel study the answers were divided equally between yes and no answers. In the McHugh study the proportion of yes and no answers varied between 100 and 50 percent. The situation then was constructed so that E, reading answers from a predetermined sequence, was not in fact answering S's questions. McHugh predicted two outcomes: (1) The greater the split, the more likely that disruption will occur because S will be surprised by receiving the same answer to so many questions; and (2) disruption

¹In this discussion S stands for subject and E for experimenter.

will occur in those splits when S asks the same question more than once and receives a different answer the second time.

Each of these techniques should make S entertain the possibility that the answers he gets are not motivated by the questions he asks. This in turn should make him question whether his original definition of the situation, psychotherapy, is actually occurring, and so create the possibility of anomie (McHugh, 1968, pp. 66-67).

Garfinkel and McHugh report basically the same results, and in both cases the outcome was not as strong as anticipated. The latter anticipated possible "anomie," and the former expected "be-wilderment, uncertainty, internal conflict, massive incongruity, psychosocial isolation, acute general anxiety, loss of identity, and various symptoms of depersonalization" (Garfinkel, 1963, p. 189). In response to incongruous answers, subjects, instead of treating them as illegitimate, sought to legitimate them by doubting their own perceptions and imputing expertise and reasons for the discrepancy to the therapist.

<u>Limitations of the Ethno-</u>methodological Perspective

Although the work of Garfinkel and McHugh is heuristically insightful, it lacks an explicit theoretical structure and testable derivations, is imprecise, and is therefore untestable. In the discussion that follows, some of the serious theoretical and methodological weaknesses of these studies will be dealt with very briefly, some of the specific design problems will be noted, and improvements in their formulation will be recommended.

<u>General Theoretical and</u> Methodological Weaknesses

Concerning theoretical and methodological weaknesses,
Garfinkel and McHugh state no scope conditions to indicate the
boundaries of their formulation's application; consequently, its
usefulness as a predictive tool is seriously affected. Furthermore, theoretical structure is missing, and there are no testable
derivations from a theory. All of the above make it difficult to
determine empirical confirmation or disconfirmation, thus seriously
limiting the scientific usefulness of the formulation. Also, the
McHugh and Garfinkel research does not reflect control of extraneous
variables, hence their conclusions may be spurious.

Due to the lack of a guiding theory and systematic research, we only can deduce that their conclusions derive from ad hoc interpretations of the data. To be fair to the Ethnomethodological School in general, it does not require a theory to guide structured research, or even structured research. They label their methodology descriptive and claim they are interested in how questions, not why questions or explanation. That is, the purpose is to discover how the actor is defining the situation, not from the scientist's point of view, but from the actor's. Given their perspective, it is difficult to evaluate the validity of their conclusions. There is nothing inherently wrong with description, but the jump from description to generalization cannot be justified.

Specific Design Problems

In addition to the theoretical and methodological short-comings mentioned above, the Garfinkel and McHugh work contains two specific design problems. The first revolves around the assumption that their research situation involved an explicit violation. In the psychotherapy experiment, the psychiatrist or student counselor was established as a figure who would aid the student. Therefore, that expectation was stated explicitly as part of the "experimental" situation. Rosenthal (1966) and others have demonstrated the qualities of a demand characteristic. In the case under discussion, the fact that the psychiatrist (counselor) was presented in this light may have influenced the subject to such a degree that it would be difficult for him to perceive that the therapist was not helping. The experiment would have been far sounder had the subject's expectations not been part of the experimental instructions.

The second, and even more important, design problem concerns the assumption that subjects have expectations for a therapeutic setting. It is more than likely that most college freshmen and sophomores (the sample) have few such expectations because they probably have not participated in therapy. It is entirely possible, then, that the subjects' unfamiliarity with the situation would confound their reactions. If they did not have well-defined expectations at the outset, and since they were told by the experimenters that they would be helped (strongly influencing and possibly even determining their expectations), then it is not unreasonable to suggest they might be unable to recognize or perceive a violation. If one were

to run the same "experiment," but substitute another freshman or sophomore for the therapist, would the same results occur? In the situation constructed by Garfinkel and McHugh, the participants were very different in status. A therapist or psychiatrist generally is considered to have high status, and a student usually would consider himself to be of lower status.

The sociological literature (Wahrman, 1970; 1972) generally accepts the premise that people of high status are considered competent by people of lower status, and that indications of incompetence are likely to be ignored or rationalized away by those of lower status. When a person of low status perceives a high status person violating his expectations, he is much more likely to assume that his perceptions are incorrect than that the other person is incompetent.

The literature also mentions a "halo" effect surrounding people of high status. This effect refers to characteristics attributed to a person as a consequence of his status, but not directly related to it. For example, a psychiatrist probably would be considered not only competent at therapy, but also honest and kind. As was stated above, the Garfinkel and McHugh situation involved a high status confederate and a low status subject. The explanation for the lack of disturbance on their subjects' part well might be due to the subjects' reluctance to perceive the therapist as a violator. They would doubt that a violation had occurred and try to make their initial expectations of the therapist (competency,

honesty, and so forth) consistent with their observations. In fact, this is what Garfinkel and McHugh found. Subjects did tend to question themselves rather than the therapist, giving him the benefit of the doubt.

Summary

In summary, the ethnomethodological perspective has provided this work with interesting heuristic insights concerning conceptualizations of violations of procedural expectations. It lacks, however, a precise theory, testable derivations, and an important substantive assertion relating status conceptions to reactions to violations of procedural expectations. Some of these gaps have been filled by the work of Berger and associates (1967; 1974), to whose research we now turn our attention.

EXPECTATION THEORY

The contribution of the work of Berger and associates (1966; 1974) to the theory developed in Chapter III is that it provides a precise and testable theory of the relationship between status conceptions and their effect on interaction.

Although much has been written about Expectation Theory, the work most relevant to this study is "Status Characteristics and Expectation States" (Berger et al., 1966). Because the entire theory is not pertinent to the formulation developed in Chapter III, the discussion will be confined to the relevant assumptions.

Berger and his associates are investigating how power and prestige orders emerge and are allocated in groups initially differentiated with respect to status and whose members are task-oriented. In such groups, members will feel constrained to evaluate their respective abilities in order to determine their probability of successful task completion. Because there are no prior task expectations, history of interaction among group members, and commitment to succeed at the task, the available basis for evaluation is the criterion upon which they are differentiated initially.

In Expectation Theory, the differentiation is based upon a status characteristic, that is, a dimension of an <u>evaluation</u> by an individual that he is better or worse than another individual at doing something. These evaluations constitute beliefs concerning positive or negative characteristics that can be attributed to the person. There are two components to this evaluation. First, an individual will be assessed as better or worse in regard to specific traits associated with the status characteristic. For example, professors are thought to be verbal and able writers, or men are thought to be more mechanical than women. Second, these specific generalizations become generalized and diffuse; a halo effect develops, and people attribute their positive or negative evaluations to the person as a whole. For example, instead of saying that professors are verbal and able writers, one would say that professors are capable in general.

Associated with perceptions of differences in status characteristics are the beliefs individuals develop concerning

various abilities or other attributes of an actor in a specific situation. In other words, actors form <u>expectations</u> about performance of specific tasks, as expressed in the statement: "Women are more capable at cooking than men." People also will form generalized beliefs, such as, "Women are warmer than men." The actor believes that, despite the situation, the person will do better. These generalized beliefs are referred to as <u>generalized</u> expectations.

The conceptions discussed above constitute an abstract definition of a <u>diffuse status characteristic</u>. In essence, an individual's perception of a status attribute (how people signify to themselves and others that they have a defined status) will cause him to assess very generalized meanings or beliefs that are associated with the status attribute.

Expectation Theory deals partially with <u>external status</u>
<u>characteristics</u>, those unrelated to the situation. For example, if
an M.D. were fixing his car, his status characteristic would be
external to the task.

In a task-oriented situation it is likely that an actor will want to assess the relative ability of himself and others at the task in order to estimate his probabilities of succeeding. Beliefs about who will and will not do well are defined as performance expectations. If the actor has prior expectations about the relative abilities of himself and others at the task, he does not need to use status conceptions to determine ability. When task ability has not

been specifically associated with or disassociated from the diffuse status characteristic, and if there is no other basis upon which an actor can infer his own and others' task abilities, then the diffuse status characteristic will be the basis for evaluation.

To summarize, in a task-oriented situation where actors are committed to the successful completion of the task, there will be a need for them to assign performance expectations to self and other. If actors P and O initially are differentiated on the basis of an external status characteristic, and if there are no other criteria for assigning performance expectations, they will be assigned on the basis of stereotyped beliefs that people have for individuals who possess similar states of the status characteristic. Moreover, if the task requires an ability that is not relevant to these stereotypical conceptions, the basis for assigning performance expectations still will be dependent upon the status characteristic because of the halo effect. As mentioned above, the theory indicates that a halo effect represents the process whereby specific generalizations become generalizations attributed to the person as a whole.

Once expectations are formed concerning task ability, they affect all future interaction in the task situation. If an actor has assigned higher performance expectations to another, then he will have less influence and prestige in the task situation than an actor who has high performance expectations of himself and low expectations of another. In the former situation the actor probably will be more

deferential, make fewer attempts to influence the group, and evaluate his own performance less favorably than those who have high performance expectations for themselves and low expectations of others.

<u>and the Ethnomethodological</u> Discourse to the Present Work

Having presented the portion of Expectation Theory relevant to this work, there now is a basis for discussing that theory and the ethnomethodological discourse in relation to this research. In evaluating the contributions of each, it becomes apparent that both have contributed significantly to the theory developed in this study.

The McHugh and Garfinkel work did not consider at least one important variable—status—that might have determined their subjects' responses. As was mentioned, the experimental condition consisted of a high status confederate and a low status subject. Their results then are not explainable solely on the basis of interaction between a subject and a confederate, because Expectation Theory has demonstrated empirically that perceptions of status in initially differentiated task groups determine the group's future interaction in terms of allocations of power and prestige for the members. Garfinkel and McHugh have not accounted systematically for how or why the process operates, simply that it seems to. It would be impossible to make any responsible generalizations from their research. However, Expectation Theory provides the tools to facilitate a comprehension of this process. It assumes that once the power and prestige order is stabilized, it maintains itself. This assumption

might facilitate an understanding of the Garfinkel and McHugh results. With a high status-low status situation and the subjects' ambiguous expectations for the therapeutic process, it is possible that they granted the therapist the credibility that their stereotypical beliefs about a person of high status would lead them to do, despite contrary evidence. Subjects therefore questioned their perceptions more than the actions of the therapist and gave the therapist the "benefit of the doubt."

Since the major theoretical assertion of this work is that the perceived relative statuses of interactants differentially will affect their reactions to violations of expectations, two goals become clear. First, a clear characterization as to what constitutes a violation of a procedural expectation must be developed. The Garfinkel and McHugh work comes the closest of any other in the literature to meeting that goal, but it is insufficient. Second, an explicit, precise, and testable theory concerning the effect of status on interaction is needed. Expectation Theory meets this goal, but its present formulation does not include conceptualizations of the effect of status on reactions to violations of procedural expectations. Therefore, the extension of Expectation Theory that is presented in Chapter III will incorporate the Ethnomethodological School's ideas concerning violations of procedural expectations.

This work, thus far, has dealt with the most relevant literature. There is, of course, other literature relating high status deviance and reactions to it. Although these sources are less germane

to the present argument, they will be presented below as indications of gaps in the literature that need examination and refinement.

SELECTED LITERATURE ON HIGH STATUS DEVIANCE

Ralph Wahrman (1970) has made an extensive and definitive review of the literature on violations of expectations. He notes, and correctly so, that authors are quite divided in their opinions about high status violators. For example, Homans (1950), Sabath (1964), Hollander (1958; 1960), Hughes (1946), Blau (1960), and Sherif and Sherif (1956) observed that higher status deviants are allowed less leeway than lower status deviants. Homans (1961), Hollander (1958), Verba (1961), and Sherif and Sherif (1964; 1965) have argued that high status deviants are protected from sanctions and therefore allowed more leeway. These studies deserve some mention here, but they contain rather serious theoretical and methodological weaknesses, some of which will be discussed below. It is not the intention of this author to present an extensive review of this literature; it is not directly applicable to the theory formulated in Chapter III, and Wahrman's work provides ample treatment. Instead, the major focus will be to point out some of the shortcomings contained in the literature and to suggest improvements, some of which will be incorporated into the theory in the next chapter.

The literature on high status deviance contains various shortcomings: Conceptualizations or definitions of deviance are not precise; reactions to, or sanctions of, deviance are not clearly defined; and there is a general neglect of definitions concerning intensity or magnitude of a violation. Discussion of these problems and methods for dealing with them in the present work are discussed below.

It is difficult to integrate the studies done on high status deviance due to the nature of their conceptualizations. There are no specifications for <u>kind of deviance</u>. Some describe but do not define procedural deviance, while others do not state or define what kind of deviance they are investigating. It is difficult, then, to determine exactly what is being measured. Therefore, it is important to the present formulation to define precisely and operationalize what kind of deviance is being investigated.

Treatments of reactions to, or sanctions of, high status violators as described in the literature suffer from the same lack of definition. Thus, it is difficult to discern what constitutes a sanction. The theory presented in the next chapter is less concerned with sanctions than with the process by which people react to violations and why. The intent is to understand the process of reactions to violations, not simply the end result. The emphasis is on why reactions occur as they do, not simply that they occur.

It is not sufficient to argue that people will react positively or negatively (sanction) to high status violators. A thematically more interesting argument involves why these differential reactions exist. The theory formulated in Chapter III attempts to clarify this issue.

It also seems important to specify the intensity or magnitude of a violation. For example, "cheating," "not helping," "murder," and "infidelity" obviously are not violations of the same intensity,

and, therefore, reactions to them should differ. The literature is seriously lacking in such distinctions. The present theory will attempt to determine on basically intuitive grounds, because no other bases are available, what would constitute a "moderate" violation, one that is not inconsequential or severe, but one that hopefully would fall somewhere in the middle. In the future it will be very important to determine empirically how violations vary in intensity.

Most conceptions of violations refer to negative breaches. An interesting perspective indicating that this is not always a valid conclusion has been offered by S. R. Maddi (1961). He has proposed a "variety" position in contrast to what he calls consistency assumptions. He argues that the unexpected can, indeed, be satisfying due to the fact that novelty, unexpectedness, change, and complexity may be inherently satisfying. He argues that consistency assumptions trivialize life and underestimate man, and, in contrast, the unexpected relieves boredom and sometimes provides delight. However, it is reasonable to expect that there is most probably a continuum of violations ranging from fairly inconsequential, to satisfying, to extremely upsetting. Because this work deals with negative violations of procedural expectations, it is important to conceptualize a violation of a procedural expectation that will be of sufficient magnitude to evoke negative responses.

In conclusion, the analysis of the literature on reactions to high status deviants indicates a need for precise definitions, precise formulations, and testable derivations which are amenable

to empirical confirmation or disconfirmation. Where relevant, the discussion has suggested how the theory in Chapter III will improve these shortcomings.

SUMMARY

The chapter has presented the two lines of thought most pertinent to this study, the works of Harold Garfinkel and Peter McHugh and the writings of Berger and associates on Expectation Theory. The former contributed conceptualization about violations of procedural expectations, and the latter offered assumptions about the relationship between status conceptions and interaction in initially differentiated task-oriented groups. Because the theory of the present work predicts that status differentially will affect perceptions of and reactions to violations of procedural expectations, the importance and limitations of both these works for the theory developed in Chapter III has been discussed.

Other relevant literature on reactions to high status deviance has been presented. Suggestions for improvements of these formulations and incorporation of these suggestions into the theory presented in the next chapter have been developed.

CHAPTER III

A THEORY OF REACTIONS TO VIOLATIONS OF PROCEDURAL EXPECTATIONS

INTRODUCTION

The theory presented here argues that reactions to violations of procedural expectations are dependent upon the relative statuses of the interactants. Before a reaction can occur, a person first must assess the relative status of both himself and the other. The justification for this assertion derives from our assumption that expectations about a person's procedural conformity or deviance are associated with their prestige. Thus, if an other (0) is considered to be higher status than person (P), P's expectations for 0's conformity to procedural rules will be more exacting (demanding) than those of a P who considers himself to be higher status than 0. In the latter instance, P's expectations for 0's conformity to procedural rules will be less demanding (exacting).

In this presentation, the scope conditions and terms of the theory will be stated; where they differ from those of Berger and associates (1966; 1974), an indication will be given. The extension of Expectation Theory then will be discussed, and the assumptions, definitions, and derivations of the theory will be offered.

SCOPE CONDITIONS AND TERMS OF THE THEORY

The interaction situation consists of members of a group, P and O, who are required to perform a <u>valued</u>, <u>competitive</u> task, T, which has only two outcomes—success or failure. The task is considered to be valued because it is assumed that P perceives the possible outcomes of the task as either success or failure. The assumption is that P is committed to success. The task is defined as competitive, both because only one of the actors can win and because of the ease of operationalizing a competitive structure in a game situation.

The theory applies only to task behavior; behavior related exclusively to social and/or emotional relationships is excluded.

The theory is formulated from the point of view of an actor, P, who is oriented to P' (the actor as an object to himself) and one other, O. It is P's reaction to the task situation that will be described. From this point on, the notation P' will refer to the actor's expectations for himself, and O will refer to the actor's expectations for the other.

The status characteristic of the culture of P is a given in the theory. For example, P perceives that a professor is more highly valued than a student, or that it is better to be honest than dishonest. Thus, it is assumed that these are universal evaluations.

Expectation Theory uses collective, not competitive, tasks.

An external status characteristic (female, male, president, professor, student, and so forth) refers to an evaluation by an actor that he is, for example, "better" or "worse" than another actor on some state of the status characteristic, such as verbal ability. The theory requires that there be only one status characteristic which discriminates between P and O in situation S, and that the only information they have about each other concerns this characteristic.

Evaluations of competence involve two factors: specific and general evaluations. The former refer to judgments of competence concerning specific traits associated with the status characteristic. For example, professors are believed to be verbal and able writers. Specific evaluations are generalized so that they become general evaluations. Instead of saying that professors are able writers and verbal, a halo effect develops, and professors become evaluated as being generally able. This generalization process constitutes an abstract definition of a diffuse status characteristic.

In the present theory, it is assumed that prestige is a diffuse status characteristic, and it is given only two distinct states. In other words, in reality there is a continuum of prestige, but for the sake of simplicity, prestige will be designated here as either high or low.

<u>Performance expectations</u> are defined as P's beliefs concerning P' and O's relative abilities at the task. Since status characteristics have been shown to affect performance expectations

(Berger et al., 1966), and since it is assumed that initially P will have to evaluate the relative capabilities of P' and O at the task (performance expectations) in order to assess his probability of success, it is essential that P have no basis for assignment of expectations to P' and O other than the state of the diffuse status characteristic. If there were preexisting knowledge concerning task ability, there would be no need for P to use status conceptions in order to determine the relative task ability of P' and O. Therefore, the theory requires that members have no prior expectations for their relative ability at the task.

Let us say that P is a student and 0, a professor. If there are no other status characteristics that differentiate P from 0, then P will use the diffuse status characteristic to assign performance expectations for P' and 0, even though the diffuse status characteristic may not be relevant to the task. In such a situation, P usually will assign concomitant states of the status and the diffuse status characteristic, that is, P would perceive the status characteristic for 0 as "professor" and the diffuse status characteristic as "prestige." If P perceives a professor as high status, then P probably will perceive the professor as able because a halo effect usually develops such that the professor is considered not only prestigious but also able, moral, and honest. This generalized evaluation of a person's ability will be referred to as a generalized expectation state. Although this construct is theoretical and not directly observable or measurable, it has importance for the theory.

The expectation state usually carries with it expectations for future performance and is stable throughout time. Thus, P will expect 0 to be competent not only at the present moment, but also in the future and in a variety of areas, even though they may not be relevant to the task.

The presentation above completes the discussion of Expectation Theory relevant to the present theory.

EXTENSION OF EXPECTATION THEORY

The theory presented here, in addition to extending Expectation Theory, will deal with a new dimension, assumptions concerning <u>procedural expectations</u> and their relation to performance expectations. The theory requires that P initially forms procedural expectations for the task. These are defined as beliefs formed by P concerning P' and O's following of the task rules. It will be predicted that actors form both performance and procedural expectations for others as well as themselves and that they are related in degree. It is also asserted that performance expectations

Although procedural expectations involve various components, for example, manners, rules of the game, moral norms, and rules dealing with aesthetics and cleanliness, the theory presented here restricts the definition of procedural expectations to "honesty," which could be classified as a moral norm. No paradigm of procedural expectations exists, and little, if any, research has been done on the topic. Consequently, the present theory has no previously established foundation upon which to build. Since it is only logical to assume that violations of different procedural norms would evoke different responses, it was necessary to choose only one type of procedural norm in order to delimit the field of study. Furthermore, restricting study to only one type of norm ensures that what one seeks to measure is, indeed, being measured.

precede procedural expectations. If P has higher performance expectations for 0 than for P', then that P will have higher procedural expectations for 0 than a P who has lower performance expectations for 0 than for P'. To be more specific, the theory is concerned with the relationship between performance expectations and the effect on P of violations of procedural expectations by 0. The theory only applies to negatively evaluated violations of procedural expectations. Such a violation occurs when P perceives 0 as violating the task rules in a way that threatens P's possibility of obtaining the rewards that P expected. A positively evaluated violation of a procedural expectation would occur if P perceived 0 as violating the task rules in order to give P more reward than P expected.

ASSUMPTIONS AND DEFINITIONS

Situation S will consist of two actors, P and O, who are performing a task. The theory makes no predictions for O's behavior.

The usage of "higher" or "lower" in reference to procedural expectations may be an imprecise semantic distinction. These words normally are used in a quantifiable sense, and procedural expectations are not strictly quantifiable. However, in this work, the usage of "high" and "low" as qualifiers for both performance and procedural expectations seems stylistically preferable. "High" and "low" procedural expectations refer to evaluations made by actors concerning how demanding or exacting their procedural expectations are for an other. It is asserted here that actors of low status will have more demanding procedural expectations (concerning conformity to procedural rules) for those of higher status than will actors who have a higher status than an other.

Definition 1: An interaction is a task situation, S, if and only if

- a. there are at least two actors, P and O;
- b. P and O are task oriented:
- c. P and O are performing a task;
- P and O are competitively oriented to task T in situation S;
- e. P and O are motivated to successful completion of the task;
- f. P and O have no prior expectations for their own or each other's performance at the task;
- g. P and O initially are differentiated with respect to status; and
- there is only one characteristic which discriminates P from O.

This completes the definition of situation S. The necessity of this definition to the theory already has been discussed.

Assumption 1:

Given the task condition in situation S, if P and O possess different states of a single external status characteristic, and if these states are not directly relevant to T, but if there is no other basis for evaluation, then the status characteristic will become the basis for discrimination.

Because P and O will feel a need to assign performance expectations concerning the task for self and other, and if no other criterion exists for such an assignment other than the external status characteristic (such as sex or profession), the status characteristic will become the basis for the assignment of performance expectations due to the halo effect.

The theory presented here deals primarily with the relationship between performance and procedural expectations; therefore, it is necessary to assert that P and O do form performance expectations and only as a result of situation S, and that performance expectations are formed only on the basis of the diffuse status characteristic. If, for example, prior performance expectations did exist, it would be difficult to determine whether P's reaction to situation S was due to the experimental manipulation or some other variable or variables.

Berger and associates (1966) assume that once performance expectations have been assigned by P to P' and O, these will determine the future power and prestige order of the members of the group. For example, if P holds a low performance expectation for P' and a high performance expectation for O with respect to ability at the task, if P is committed to success at the task, and if P believes that O is more likely to do well, "P will . . . make fewer attempts to influence O than will a second P who holds a high performance expectation for self and low for other" (Berger et al., 1966, p. 40).

It is assumed that this statement also applies to the present theory. Once the performance expectations are assigned by P for P' and O, they will determine the power and prestige order in such a way that the probabilities of distributions of influence, disagreements, deference, and so forth, will be different for members who have a higher expectation for themselves at task ability than for those who have a lower expectation.

The theory asserts that P will have not only performance expectations for P' and O, but also procedural expectations for P' and O, and that they are related in degree.

<u>Definition 2</u>: In S, P will have two kinds of expectations for P' and O, and they are related in degree:

- a. performance expectations, and
- b. procedural (normative) expectations.

Berger and associates (1966) also posit that the external status characteristic carries a halo effect such that a high status person will be considered not only able, but also kind, moral, honest, and so forth. In this theory the halo effect is reformulated to assert that P has not only performance expectations for P' and O, but also <u>procedural expectations</u>. In other words, in a task situation P has beliefs concerning P's and O's normative behaviors, and these beliefs are related to P's performance expectations for P' and O. We expect, then, that a P who has higher performance expectations for O than for P' also will have higher procedural expectations than will a P who has higher performance expectations for P' than O.

To summarize, when people are involved in a situation, S, they not only form performance expectations concerning the relative task abilities of the group members, but also have normative expectations concerning how members should behave in the situation, that is, what constitutes the proper behavior. These unspecified, informal rules are brought by members into a situation and define what constitutes proper (normative) behavior, for example, cheating

is not proper. If an actor violates one of the task rules, one certainly would expect some reaction from the other participant. It is proposed that the effect that performance expectations have on the power and prestige of a group is identical to the effect procedural expectations will have on a group, and that performance expectations precede and are related in degree to the formation of procedural expectations. That is, a P who has higher performance expectations for 0 than for P' and who is the recipient of a violation of a procedural expectation by 0 will be more deferential and disagree less with 0 than a P who has higher performance expectations for P' than 0.

It is posited that performance expectations precede procedural ones. P first will assess performance expectations for P' and O and then assign procedural expectations to P' and O and to the same degree. In other words, a person first will be defined as high status and more generally capable at a task, and this evaluation then will be generalized so that the person also is seen as being more honest, and so forth.

Some notation needs to be introduced.⁴ From this point on, P's who have higher performance expectations for 0 than P' will be referred to as L-H, and P's who have higher performance expectations for P' than 0 will be referred to as H-L.

⁴The notation in this research will follow that of Berger and associates.

The issue of reactions to violations of procedural expectations is more complex than what has been presented thus far. Although L-H recipients of a violation will be more deferential and disagree less with an 0 than will H-L recipients, their perceptions of and reactions to the violation will be a <u>function</u> of the subjective probability they hold for the likelihood of the occurrence of a violation. In other words, L-H P's not only will be more deferential once a violation has occurred, but also will be less likely to identify the violation and will react differently to 0, depending upon 0's status relative to P.

Assumption 2:

The higher the performance expectations P holds for 0 relative to P', the less P will expect 0 to emit a violation of a procedural expectation.

Some research indicates that people will refuse to perceive a high status person as a violator. The Balance and Consistency Theorists (Heider, 1946, 1958; Festinger, 1957; Newcomb, 1953, 1961; Osgood and Tannenbaum, 1955; and Rosenberg and Abelson, 1960) suggest that people's cognitive processes tend toward balance and consistency because they are uncomfortable with the opposite; when presented with inconsistent or imbalanced information, people try to make the cognitions consistent by denying them, changing them as little as possible, or by reevaluation. Particularly with regard to high status nonconformity, Osgood (1960), Osgood and Tannenbaum (1955), and Krech, Crutchfield, and Ballachey (1962) have indicated that the more extreme

the attitude, the harder it is to change. Here we assume that P's expectations (attitudes) about cheating are stronger for a status superior and weaker for a status inferior. Thus, L-H P's will be less likely to notice a violation than will H-L P's, and, because they have stronger beliefs about the honesty of high status people, it will be much more difficult for them to change their opinion.

If people actually have higher procedural expectations for a high status person, for example, that they are honest, then it is reasonable to assume that a status superior is expected to "cheat" much less often than a status inferior. The Cognitive Dissonance Theories point out the dissatisfaction, tension, and discomfort that people experience when their world is not "balanced," that is, when the unexpected occurs. It is also reasonable to assume that it takes longer for someone to perceive and act on the unexpected, especially in an unfamiliar situation. We assert that L-H P's will be less likely to perceive (and it will take them longer to do so) that a violation is occurring than H-L P's. L-H P's will be much more likely to see themselves as "seeing things" or misperceiving the situation.

- $\underline{\text{d.l.}}$ If P has higher performance expectations for 0 than for P', P is less likely to perceive violations of procedural expectations emitted by 0.
- $\underline{\text{d.2}}$ If P has higher performance expectations for P' than for O, P is more likely to perceive violations of procedural expectations emitted by O.

- $\underline{\text{d.3}}$ The higher P's performance expectations for 0 than for P', the longer it will take P to notice and/or react to a violation of a procedural expectation emitted by 0.
- $\underline{\text{d.4}}$ The higher P's performance expectations for P' than for 0, the more quickly P will notice and/or react to a violation of a procedural expectation emitted by 0.
- If, for example, P's in the L-H condition have higher procedural expectations for 0 than P's in the H-L condition, a violation by 0 in the L-H condition will be less expected than a violation by 0 in the H-L condition. Because the violation is less expected in the L-H than in the H-L condition, it is assumed that the L-H P will feel less positively toward 0 than will the H-L P.

Assumption 3:

The more unexpected a behavior, the stronger will be the reaction.

 $\underline{d.5}$ If P has higher performance expectations for 0 than for P', and if 0 violates a procedural expectation, once P notices the violation, P will feel less positive toward 0 than would a P with higher performance expectations for P' than 0.

It is asserted here that unexpected behavior causes strong negative reactions and that the higher the status of an actor, the higher are the expectations that he will conform to procedural rules. Conversely, the lower the status of an actor, the less he will be expected to conform to those rules. Because nonconformity to procedural rules is less expected by an L-H P than by an H-L P, reactions

to violators in the L-H situation will be less positive than in the H-L condition.

An entirely separate issue arises when P's overt responses to a violation are considered. It is assumed in this theory that overt responses to a violation always will be less likely in L-H than in H-L situations, but this most definitely will be the case when 0 has sanctioning power over P. If P would lose some rewards by sanctioning 0 (there is a higher probability of this in the L-H than in the H-L situation), it is assumed that overt and covert reactions might be very different. If a manager strikes an employee, the latter is less likely to strike back than if his assailant were someone of lower status. Although in this instance the behavior is less expected and therefore should evoke a stronger response, the potential loss of rewards should mitigate an intense overt reaction. However, a stronger covert response is anticipated because such behavior is less expected from a status superior.

Assumption 4:

The higher the relative performance expectations that P holds for O relative to P', the less the likelihood that negative behavior will be overtly manifested when O violates P's expectations, but especially if O controls sanctioning power over P.

 $\underline{\text{d.6}}$ If P holds higher performance expectations for 0 than for P', and if 0 violates P's procedural expectations, P's reactions will be more covert than overt.

d.7 If P holds higher performance expectations for P' than for 0, and if 0 violates P's procedural expectations, P's reactions will be fairly equally covert and overt.

The reasoning for d.7 is that in this situation 0 has little sanctioning power over P. Therefore, P has nothing to lose by making the reactions congruous.

Finally, there is the issue of resolution of the disturbance and how that resolution comes about over time. For example, can one violation qualitatively change a relationship between two people temporarily or forever? Although this question is extremely interesting, it will be deferred to future research.

SUMMARY

The presentation of the theory is completed. It differs from previous Expectation Theory formulations in three ways. First, it adds and defines the concept of procedural expectations, in particular, violations of those expectations. Second, it posits a relationship between performance and procedural expectations.

Third, it makes perceptions of and reactions to violations of procedural expectations probabilistically dependent upon performance expectations. In particular, the higher P's performance expectations for O relative to P', the higher the probability that P will take longer to notice and/or react to a violation emitted by O, and the less positive will be P's response to O, in general, as opposed to a P who holds higher performance expectations for P' than O. Also,

in the L-H situation, P's overt and covert responses to 0's violation of procedural expectations will be much more discrepant than P's responses in the H-L situation.

Through the testable derivations of the theory, the author will seek to determine its confirmation status in Chapter IV. Because, as reported in Chapter II, many of the derivations of Expectation Theory already have been tested, the focus of this endeavor will be to test the predictions that are specific to this theory.

The derivations to be tested are:

- $\underline{\text{d.8}}$ The probability that P will perceive a violation is less in the L-H situation than in the H-L situation.
- $\underline{\text{d.9}}$ In the L-H situation, the probabilities are greater that P will take longer to notice a violation and/or react to a violation than in the H-L situation.
- $\underline{\text{d.10}}$ The probability of P feeling negative toward 0 in the L-H situation is greater than in the H-L situation.

These predictions will constitute the empirical tests of the theory, presented in Chapter IV.

Chapter V will describe the experimental setting, the developmental task problems, and the physical equipment used.

CHAPTER IV

EMPIRICAL TEST OF DERIVATIONS FROM THE THEORY

This chapter first will deal with the major objective of a task situation, namely, operationalization of the derivations from the theory. It then will discuss the problems encountered in meeting this objective. Finally, the solutions to the various problems will be presented.

OPERATIONALIZATION OF VARIABLES

In order to operationalize the states of the diffuse status characteristic (independent variable), the subject and confederate were introduced to each other and told their states of the diffuse status characteristic. In the L-H condition, subjects were told that the confederate was Dr. Gordon, a professor from the University of Michigan. In the H-L condition, the confederate was introduced as a high school student. The subjects were undergraduate students at Michigan State University.

A violation of a procedural expectation, the second independent variable, was operationalized by having the confederate not follow the rules of the game. The trials during which this occurred will be referred to as the critical trials.

The dependent variable concerning subject's feelings toward the confederate was operationalized by having the subjects complete, after the experiment, an adjective test that revealed positive or negative feelings.

Differential perceptions and reactions to violations, the second dependent variable, were much more difficult to operationalize. It was necessary to devise a measure for these factors on the critical trials. Asking subjects at the end of the experiment if they had noticed cheating and on what trials would be unsatisfactory for three reasons: (1) recall may be biased; (2) subjects might be reluctant to verbalize their perceptions to an experimenter; and (3) this method would not directly test the prediction. Various alternatives for operationalizing the second dependent variable were explored, and many were rejected as inappropriate.

REJECTED ALTERNATIVES

In order to understand why so many attempts to operationalize the dependent variables were rejected, it must be noted that one of the major goals in developing the research design was an effort to construct a standardized experimental situation. The principal feature of such a setting is that the experimenter gains a large degree of control over the situation, the advantage being to minimize the effect of extraneous variables. The researcher can feel more confident that what initially was to be measured was, indeed, measured.

Measures of Perceptions and Reactions to Violations

Alternatives for operationalizing perceptions and reactions to violations were explored. One possibility was a face-to-face interaction between subject and confederate with the experimenters behind a one-way mirror coding various facial and verbal responses. This technique was rejected because face-to-face interaction, regardless of the skill of the confederate, would involve the confederate giving cues to the subject, such as nonverbal cues, and because verbal interaction could occur. For example, it would be very easy for the subject to question the confederate on the critical trials, and it would be extremely difficult to standardize the confederate's reaction to ensure that each subject received the same response; different subjects might ask different questions to which a standardized response would not be appropriate.

Another alternative considered was the use of physiological measures. A Grass Recorder could have provided readings of skin conductance, gut motility, EKG, and perspiration rates. However, a review of the literature showed contradictory opinions about what these devices actually measure. Pupil dilation, another physiological measure, seemed to have more support in the literature in terms of reliability, but this technique was not practical in terms of the equipment and expertise available to the researcher.

Also explored was the method of having the subjects record on paper, trial by trial, their reactions to the task. This

alternative had two drawbacks: (1) possible increase in suspicion rates of subjects; and (2) more complicated instructions for the subject to remember.

Another alternative was to give the subjects 30-second rest periods during the experiment. They simply could press a button labeled "rest," which would indicate to the other that they also had 30 seconds to rest. The assumption here is that the more disturbed the subjects are, the more rest periods they will take. This method was discarded for pragmatic reasons. Assuming subjects did take rest periods, additional time would be added to the experiment, and the number of subjects that could be run on a given day would be decreased. In addition, there were standardization problems. It is impossible to predict the effect that 30 seconds of extra time would have on the subjects; all subjects probably would not be taking rest periods, and if a difference occurred between the two conditions, it would be difficult to determine whether the rest period was in some manner responsible.

Another trial-by-trial approach considered was some sort of challenging mechanism. Participants could challenge their opponent's word, write "challenge" on a board, and consult a dictionary. If their challenge was correct, they would add points to their score; if incorrect, their opponent would deduct points from their score. The assumption here would be that L-H subjects would be less likely than H-L subjects to challenge their opponent. The fact that they did or did not challenge would constitute a

measure of their perceptions of and reactions to a violation. The challenge technique presented standardization problems; the challenge might affect subjects' responses in some manner that could not be measured. This alternative also was rejected because of the extra time the experiment would entail. Experiment length is an important factor because subjects can become bored or apathetic if the experiment is too time consuming.

The last alternative to be discussed involved having the subjects in separate rooms, but allowing them to send message slips to each other. It was conjectured that subjects who caught a violation would send more message slips to the confederate than subjects who did not. This procedure seemed unnecessarily complicated. It would be necessary to have someone act as messenger, and the messenger might give off cues. This procedure also would create a lengthy experiment. A content analysis of the notes would be cumbersome, and it would be difficult to predict what the subject's messages would contain and therefore difficult to standardize the confederate's replies.

Timing Devices

Problems were encountered with attempts to find an appropriate timing mechanism to demarcate the beginning and ending of a trial. When the experiment was conceived as face-to-face interaction, the possibility of using a regular sand timer in conjunction with a buzzer was explored. Subjects alternately would play and time each

other, then press a buzzer to let each other know when to begin or end a phase. However, the sand timer proved undesirable when tested by the researcher. It was found that (1) some people became so involved in their opponent's progress that they forgot to notice when time had expired, and (2) in continual usage some of the sand in the timers did not return to its original cavity. Both difficulties certainly would cause a standardization problem because trial times would vary. Moreover, it was possible that subjects who accidentally received more time might impute meanings to this behavior which would confound the experiment results.

Two other timing alternatives were considered: (1) piping the experimenter's voice into rooms to announce the beginning and the end of the trial, and (2) having an experimenter in the room designated as the timer to call out "start" and "finish." These options were thought to be unsatisfactory because any source other than the confederate might bias the subject's reaction, for example, the subject might expect the experimenter to interfere when cheating occurred. Since the theory does not include statements concerning reactions to sources other than the opponent, an experimenter's presence might confound the results.

Many possible ways to violate expectations were considered. If the sand timer were employed, the confederate deliberately and consistently could allocate more or less time to the subject by manipulating the timing mechanism. But the necessity for the subject to observe such manipulation obviously involved face-to-face interaction,

a possibility that already had been discounted; furthermore, use of the sand timer also had been rejected. Other alternatives were to have the confederate continue to work after time was up, or to create violations through the way in which game rules were stated. The choice of violation and why it was selected will be discussed later in this chapter.

CHOSEN EXPERIMENTAL SITUATION

It was determined that in order to control variance the subject and confederate must be in separate rooms with no means of communication other than that necessary for the experiment. In a face-to-face interaction, for example, subjects could receive unnecessary cues concerning status or task performance. Since the theory requires that the subject and confederate be differentiated on only one status characteristic, it was important to ensure that subjects did not receive additional cues. The standardized design, then, would keep the subject and confederate completely separated. Although the final procedure chosen involved rather complicated manipulation of the laboratory machinery, it proved to be the most satisfactory alternative by far. In fact, it simplified the experiment tremendously.

To increase standardization and optimize time efficiency, the entire task situation was recorded on videotape and transmitted to the subject via television. This assured that all subjects would receive the same stimuli under all experimental conditions. (See Kruse [1972] for a discussion of the benefits of videotape usage in

experimental situations.) Under all experimental conditions, all cues, innuendos, and messages are uniform. If the experimenter were to have direct contact with subjects, biasing cues could be projected. In this particular experiment the subject was exposed only to the experimenter's voice in order to diminish any possible visual cues. Moreover, a speech specialist read the audio portion of the taping and was requested to be as neutral as possible (not give off unnecessary vocal cues). The subjects found the entire procedure very credible.

Another benefit of the videotape method is the effective communication barrier it constructs between subject and confederate. The confederates also were taped and were introduced visually (not verbally) at the beginning, which prevented any other cues being emitted during the rest of the experiment. The technique proved to be a time and money saving device; there was no need to arrange schedules around the availability of the confederate or to pay her to be present during the experiment.

Other measures were taken to increase standardization. The same experimenter always was present, and she dressed and looked as similarly as possible each time; the same recruiter obtained all the subjects; the same person telephoned subjects to schedule and remind them of their appointments; and the same message was used each time. Subjects responding to ads that had been placed in the student newspaper or in their dormitories spoke to an automatic answerphone device and received the same message. This mechanism was very useful not

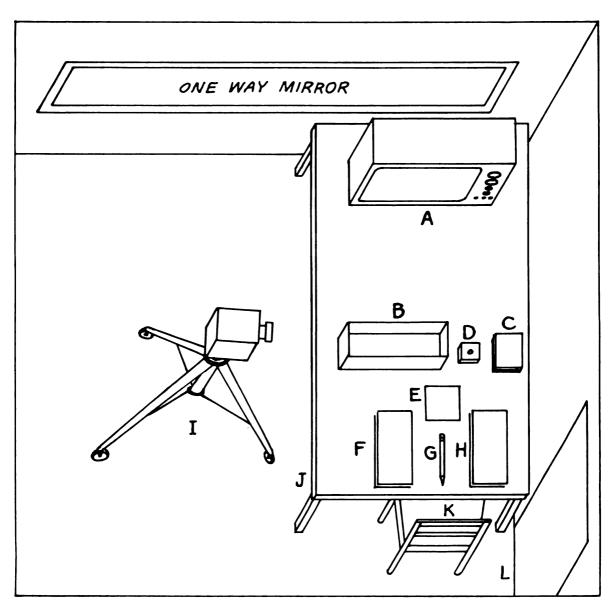
only because it maximized standardization, but also because it was unnecessary for someone to be in the laboratory to answer the telephone.

Further discussion of the solutions to the general task problem and the reasons for choosing them will be presented during the description of the sequence of the experiment.

PHYSICAL SETTING

The activity room was completely separated from the observation room in this experiment (the one-way mirror between the rooms was completely covered up). Figure 4.1 depicts the structural layout of the room and the necessary apparatus. The subject enters and is seated at a table. At the end of the desk is a television, from which all instructions and experimental stimuli will be received. On the desk are the materials (see Appendix A) required for participation in the experiment. There is a dummy camera in the ceiling which subjects are told is the camera that televises their faces and introduces them to the other. (Of course, a confederate has been pretaped for the purpose of introduction.) A camera to the left of the table is focused on the spot where subjects will put the materials to be transmitted to the opponent. There is a buzzer on the table for the subjects to use in the event they have any questions.

Except for references to the introduction of the confederate on the tape, all further statements about other, confederate, or opponent refer to the experimenter.



A - television

B - word and communications box

C - communications pad

D - buzzer

E - list of rules of game

F - word sheets

G - pencil

H - scoring sheets

I - camera

J - table

K - subject
L - door

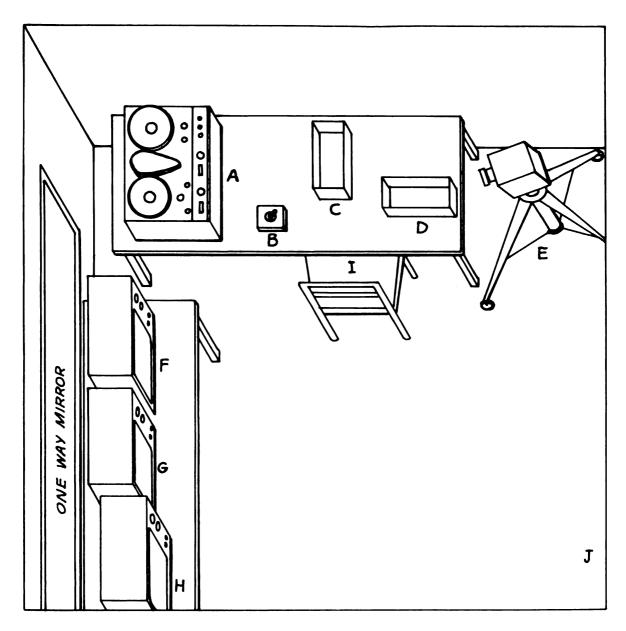
Figure 1. Activity Room

Figure 4.2 depicts the observation room. On the table on the left wall are three monitor television sets. One picks up the output from the videotape machine, the second transmits the subject's material, and the third transmits the confederate's material. The first set is to ensure that the visual portion of the videotape is functioning; the second set enables the experimenter to see and score the subject's material; and the third set transmits the confederate's responses to the subject. On top of the third television is the audio monitor for the videotape.

On the desk along the other wall is the videotape machine, a camera to focus on the confederate's material, a box containing the confederate's standardized material, and a mechanism that allows the confederate to switch back and forth from videotape to camera input into the subject's room. This is necessary because the experiment involves switching from the videotape (of the confederate's pretaped introduction) to live action and responses (when the experimenter scores individual subjects).

SAMPLE

Subjects were recruited from the undergraduate population of Michigan State University for "a study involving 'Word Cognitive Ability.'" Three recruiting methods were used. (1) Requests were made during classes according to a modification of a standardized procedure used in previous experimental research on Expectation Theory (see Appendix B), and (2) ads were placed in the school



- A Videotape machine
 B Switching box
 C Confederate materials

- D Word and communications box E Camera

- F Monitor TV
- G Monitor TV
- H Monitor TV
- I Experimenter J Door

Figure 2. Observation Room

newspaper and (3) on bulletin boards in dormitories and classroom buildings (see Appendix B). Those who expressed interest in class filled out forms asking their name, sex, and telephone number. Those answering ads, which listed the laboratory number, spoke to an answerphone which asked them to leave their name and telephone number (see Appendix B).

From the subject pool thus accumulated, it was decided that only female subjects would be chosen for this experiment. The reasons were twofold: (1) The experimenter was female, and it was felt that a same sex experimenter and subject would not introduce unnecessary bias (Rosenthal, 1966), and (2) females at Michigan State University participate in experiments three times more often than males, which means they are easier to obtain.

Subjects were scheduled for experiments by telephone according to a standardized procedure (see Appendix B). They were contacted again the night before to remind them of their appointment. (This one technique reduced the no-show rate to about 1 percent, even during exam week.) If the subject did not plan to appear, this reminder call gave the experimenter time to schedule someone else. Subjects were excluded from the sample if the recruiter determined that they previously had participated in a social-psychological experiment involving deception. Although the question of race and its differential impact on subject responses still is not clearly understood, there is enough evidence to indicate that it may have some biasing effect (Cantril, 1944; Williams, 1964; Williams and Cantril,

1945; Katy, Robinson, Epps, and Waly, 1964); therefore, members of racial minority groups were excluded. A total of 50 subjects were run, 27 assigned randomly to one condition and 23 to the other.

The study had two experimental conditions. As stated in Chapter II, the L-H condition consisted of a high status confederate and a low status subject, and the H-L condition involved a high status subject and a low status confederate. The status variable was manipulated simply by visual videotape introduction of the confederate to the subject.

SEQUENCE OF THE EXPERIMENT

The subject arrived at the laboratory and was greeted by the experimenter. As the two walked down the hall they passed a closed door bearing the sign "Participant #2." The experimenter pointed to the door and said: "You will be playing with participant number two." The subject was led to her room, which had a sign reading "Participant #1." She was asked to sit down and look and listen to the television set in front of her. The experimenter then left and closed the door.

Immediately after the door was closed, the experimenter's voice came into the activity room through the subject's television. She was thanked for joining the study, which was explained as an attempt to judge the effectiveness of groups working together using new kinds of communication equipment rather than face to face.

The Word Cognitive Ability Task

In order to ensure that performance expectations were based solely on the diffuse status characteristic, subjects were told (Appendix A) that this task was a <u>unique</u> one, having nothing at all to do with verbal, artistic, mechanical, or mathematical ability. They then were told that they would be introduced to each other, and, depending upon the condition (L-H, a professor, or H-L, a high school student), the confederate was flashed on the screen. This manipulation constituted an operationalization of the diffuse status characteristic.

After the introduction, the task situation was explained. Subjects were told that some letters would be flashed on their screen, and from these letters they were to make as many allowable (according to the rules of the game) words as possible. They were instructed to copy the letters from the screen onto their word sheets (see Appendix A) and then construct as many words as possible in a forty-second time period. Subjects were told that a buzzer would sound to denote that time was up, at which point they were to put their sheets in a box.² A camera would transmit their words to their opponent. As soon as they saw their opponent's words on the

²The box was necessary because the camera could focus accurately on small writing only in a very limited area. This procedure had other positive effects: (1) Subjects could not see the confederate, and (2) the confederate's words could be written out in advance. Both of these factors increased standardization.

screen, they were to copy the letters for that trial onto their scoring sheet (see Appendix A), copy their opponent's words, score them, put the score on a separate sheet, and place the sheet in the box so that the scores could be transmitted to each other. They then were to copy their own score onto the scoring sheet below the score they had entered for their opponent. Subjects were given sixty seconds in which to complete the scoring process, at which time a buzzer sounded. Five seconds later a buzzer designated the beginning of a new trial.

The word sheets were used for two reasons. First, because the sheets were programmed (see Appendix A), they condensed the instructions and gave the subject a step-by-step guide for how to play the game. It was felt that this would strongly diminish any possible misunderstanding of the task instructions. Second, the sheets would provide evidence of whether or not subjects understood the rules (a scope condition of the theory). The scoring sheets also were used for these two reasons and because they provided empirical data about the subject's reactions to the critical trials. These latter involved the confederate making up words that violated the rules of the game. How subjects scored these critical trials, that is, whether or not points were deducted for a violation, is an operationalization of perceptions of and reactions to violations, the dependent variable.

It was thought that if the subject had to recopy the letters on the scoring sheet (already having copied them on their

word sheet) <u>and</u> copy their opponent's words, then any violation should become much more apparent to them than if they just scored off the screen. The assumption was that copying the letters twice would imprint the allowable letters for that trial on the subject <u>and</u> make any violations more obvious. Furthermore, having to write their opponent's score <u>and</u> their own score just beneath it should give the subjects a trial-by-trial comparison of their respective abilities at the task³ and also should provide an indirect measure of the status manipulation when they reported who they thought won the game (as opposed to who actually won).⁴ It is assumed that the subject's assessment of who won the game would be more a function of the initial performance expectations for P' and O and less a function of reality.

The timing problem was solved by the decision to use the videotape equipment. Because the entire experiment was recorded on videotape, the buzzes that denoted the beginning and ending of each trial phase when the experiment first was recorded were also on the tape. Therefore, all timing intervals were exactly the same for every subject. This seemed a measurable improvement over the other possibilities considered and also avoided any problems the

³Most Expectation Theory experiments do not include this trial-by-trial feedback.

⁴Notice that there is no ability manipulation in this experiment, and no predetermined "winner." It is equally likely that the subject or the confederate could win.

experimenter might have had with stop watches (they become faulty) or other devices that could require varying times to switch on or off during the experiment.

The experiment involved switching from the video portion of the tape to live action. At the stage when word sheets were to be shown to the subject, the experimenter switched to a camera focused on the word and scoring box in the experimenter's room. Live action continued until the scoring process was completed.

Each subject was given two practice trials. The experimenter then knocked on their door, entered the room, and asked if there were any questions. Subjects' sheets were checked to make sure they had understood the instructions.

The total number of trials was twenty, seven of which were critical: trials 4, 6, 9, 13, 14, 17, and 18. To decrease suspicion, it was decided that critical trials should not be spaced at regular intervals, that is, two noncritical, two critical, and so forth. It also was deemed important that no critical trials occur in the beginning of the experiment; an early violation might increase suspicion.

The violations eventually chosen were from a list of many possibilities submitted to a panel of academics, who were asked to rate them on scales of severity and blatancy. The trials progressed from nonsevere and nonblatant to severe and blatant violations. In addition to decreasing suspicion, as noted above, this progression procedure was chosen for an even more important reason. On nonsevere trials it was expected that subjects in the L-H condition definitely

would be more likely to give the confederate the "benefit of the doubt" than would subjects in the H-L condition, which operationalizes the prediction that L-H subjects would be slower in perceiving and reacting to a violation than would H-L subjects. That is, L-H subjects would question themselves before they would question the confederate, the opposite of what is expected in the H-L condition. However, if a violation were severe, it would be difficult for either H-L or L-H subjects to ignore it.

All of the confederate's materials, derived from thirty test cases submitted to a panel, were standardized. The words selected had appeared with the most frequency on each test case trial, and they were averaged for inclusion in the material.

Originally, instead of letters, words were going to be flashed. However, in the process of trying to develop "neutral" words and testing them on the panel, it was found that no word really had neutral, nonaffective meanings. Thus, ten lettered dice were thrown twenty times. The letters from each throw were used for each trial.

Posttrials Phase

After the trials were completed the experimenter knocked on the door, entered the subject's room, collected the materials, and asked the subject to fill out an adjective test (see Appendix A) rating her opponent. This constituted an operationalization of subjects' feelings toward the opponent. When finished, they were

led into the debriefing room, where a postexperimental interview was administered (see Appendix A). This interview sought to measure suspicion rates and subjects' initial purported relative performance expectations. In other words, subjects were debriefed. The study, the reasons for it, and the manipulations involved were explained to them, and any questions were answered. Their cooperation in not discussing the experiment with other students was solicited.

After the debriefing, subjects were asked a final question:
"At any time during the experiment did you feel that your opponent
was cheating?" This question was posed after debriefing to see if
answers differed according to H-L and L-H conditions. Such a
blatant question entailed no risk of suspicion at this point in the
experiment, and it was felt that the replies might provide some
heuristic insights for the future. It should be emphasized that
this last question was included mainly for heuristic purposes.

The subjects were thanked and paid \$2.00 for their participation. They again were asked not to repeat the specifics of the experiment to their friends.

The analysis of the data from this experiment and the confirmation status of the derived predictions from the theory will be presented in Chapter V.

CHAPTER V

ANALYSIS OF DATA

This chapter first describes the inclusion and exclusion criteria that were used to obtain data for analysis. Second, it presents and discusses the results and their implications. Third, some suggestions are made for future improvements of the research.

INCLUSION OF DATA

General Criteria for Exclusion

In executing an experiment it is impossible to ensure that all subjects will meet the fixed initial scope conditions of the theory; if they do not, their data must be excluded from the analysis. For example, the theory requires that all subjects have no prior expectations for the task, but a subject may have participated in or read about deception experiments; therefore, he or she would not meet one of the fixed initial conditions as stated in the definition of situation S. When a subject does not meet one or more of the theory's scope conditions, his or her data must be excluded because the theory does not make any predictions about his or her behavior.

Specific criteria for exclusion were established before the experiment began. Thus, the experimenter could not exclude a subject who might have had an unusual pattern of responses on the postexperimental data. This precaution was, and always is, necessary since it prevents the inclusion or removal, on intuitive grounds, of a subject who might bias the results for or against the theory's predictions.

There were five specific exclusion criteria. First, data were to be removed if subjects showed suspicion about some part of the experiment. In this category were placed subjects who did not believe they really were playing against the stated, or any opponent, or subjects who believed that the confederate's words were predetermined or that the game was "rigged" by the experimenter. Second, those subjects who did not remember who they played with were to be removed from the analysis. For example, some in the L-H condition said they played against a college student instead of a professor. Third, lack of task orientation would warrant exclusion, such as subjects who did not complete the task or did not follow instructions. Fourth, also to be removed were subjects who failed to have a competitive orientation. As it turned out, only one subject fell in this category. Fifth, screening problems also were to be a basis for exclusion. In this category eventually were included some subjects who should have been omitted in the recruiting process and a handicapped subject whose inability to perform the task properly did not become apparent until actual trials were run.

Exclusion criteria for all but the fifth category were determined from the following information. The postexperimental interview contained standard questions designed to determine whether

the scope conditions of the theory were met. For example, subjects were asked how they felt about their opponent and the task, and how they expected their opponent to do before the task began and why. They also were asked if they ever had read about or participated in an experiment "like this one," probing for deception experience or other disqualifying criteria. The subjects' scoring sheets then were examined to make sure that they had followed the experimental instructions. If in either of these stages a reason for exclusion was found, the data were removed from the analysis.

The researcher hoped to increase standardization of the interview process and reliability of inclusion-exclusion criteria by conducting all interviews herself and by checking all decisions for inclusion or exclusion with two others involved in the experimental process. All interviews were listened to and checked for reliability against the written responses.

Specific Cases Excluded

Of the 50 subjects run, 27 in the L-H condition and 23 in the H-L condition, 4 were excluded because they were suspicious.

One had participated previously in a deception experiment, one was a senior psychology major, one had seen the film "The Milgram Experiment," and one simply did not believe that she was playing against a professor. These 4 subjects constituted .08 of the original sample. Considering the amount of deception in this experiment and the fact that suspicion rates normally run between 20-30 percent.

this rate was extremely low. Moreover, 3 of these 4 subjects never should have been included in the sample, but should have been screened out by the scheduler initially.

Also excluded from the analysis were 3 subjects who could not remember with whom they were playing. One in the L-H condition simply did not recall, but after probing said: "maybe a college student." Another said: "someone own age," and the third also could not remember who she played with. In future experiments, it may be advisable to give subjects a longer exposure to the confederate in order to decrease this kind of problem.

Of course, one subject who did not follow instructions properly was excluded.

One subject had to be excluded for lacking a competitive orientation because she could not recall that she even had an opponent.

The fifth type of exclusion case, screening problems, already has been discussed above. Three of the four subjects omitted because of their suspicion also could be included in this category, as was the one physically handicapped subject.

Once these specific cases were excluded, the data analysis then was based on results obtained from the remaining 40 subjects, which yielded an n of 20 in each condition.

RESULTS

Responses to Violations of Expectations

The data from each subject consisted of the subject's reaction to the critical trials, that is, those that contained the violations. For this phase of the data the subject's method of scoring the confederate constituted the empirical measure of her reactions. It was expected that reactions to violations would vary according to the experimental condition; the effectiveness of the status manipulation, and the consequent performance expectations that are formed, differentially should affect the subject's responses to violations in each of the experimental conditions. The main statistic for this portion of the data analysis is the total proportion of subjects in each condition that detected violations and the proportion of subjects in each condition that registered the violations on the critical trials.

The major tests of the theory involved the prediction that the subjects' responses will vary according to their initial performance expectations for self and other.

 $\underline{\text{d.8}}$ The probability that P will perceive a violation is less in the L-H situation than in the H-L situation.

Subjects in the L-H condition are expected to score fewer violations than those in the H-L condition. Table 5.1 presents the data for total violations detected per condition, in frequency form.

Table 5.1. Total Frequencies of Violations Detected on All Critical Trials, by Condition.

Condition	Violations Detected
L-H	
Percentage	.32
n	(45)
H-L	
Percentage	.41
n	(58)

Table 5.1 indicates that the data are in the direction predicted. Of the subjects in the H-L condition, 41 percent detected violations, as opposed to 32 percent in the L-H condition.

A more specific kind of examination breaks down, by condition, the percentage of subjects that responded to the seven possible violations. Table 5.2 presents these data.

Table 5.2. Frequency of Detected Violations, by Condition.

			Viola	tions	Dete	cted	d					
Condition	0	1	2	3	4	5	6	7				
L-H												
Percentage	0	.20	.40	.35	.05	0	0	0				
n	(0)	(4)	(8)	(7)	(1)	(0)	(0)	(0)				
H-L												
Percentage	.10	0	.30	.30	.10	.20	0	0				
n	(2)	(0)	(6)	(6)	(2)	(4)	(0)	(0)				

As stated above, the theory predicted that subjects in the H-L condition would register more violations than subjects in the L-H condition. By comparing rows 1 and 2, the prediction seems to hold. Table 5.2 indicates that, in terms of percentages, subjects in the L-H condition responded to far fewer violations than did subjects in the H-L condition. Probably the most interesting aspect of this table is that 20 percent of the subjects in the H-L condition noted five violations, whereas no subjects in the L-H condition registered more than four. It is also interesting that only 5 percent of the subjects in the L-H condition detected more than three violations, whereas 30 percent in the H-L condition registered more than three. The data, then, seem to support the prediction that subjects in the L-H condition would register fewer violations than subjects in the H-L condition.

The theory also states that the differential performance expectations should cause the subjects in the L-H condition to take longer to recognize and/or score a violation than those in the H-L condition.

 $\underline{\text{d.9}}$ In the L-H situation, the probabilities are greater that P will take longer to notice and/or react to a violation than in the H-L situation.

Thus, an examination of the data should demonstrate that the trials with more "subtle" violations will contain higher discrepancies between the percentage of subjects detecting violations than trials with more "severe" violations. If this assumption is

Table 5.3.	Percentage of	Violations	Detected on	Critical	Trials,
	by Condition.				

Detected Violations on Critical Trials						
4	6	9	13	14	17	18
.10	.05	.05	.25	.75	.05	1.00
(2)	(1)	(1)	(5)	(15)	(1)	(20)
.30	.25	.10	.50	.90	0	.85
(6)	(5)	(2)	(10)	(18)	(0)	(17)
	.10 (2)	.10 .05 (2) (1) .30 .25	4 6 9 .10 .05 .05 (2) (1) (1) .30 .25 .10	4 6 9 13 .10 .05 .05 .25 (2) (1) (1) (5) .30 .25 .10 .50	4 6 9 13 14 .10 .05 .05 .25 .75 (2) (1) (1) (5) (15) .30 .25 .10 .50 .90	4 6 9 13 14 17 .10 .05 .05 .25 .75 .05 (2) (1) (1) (5) (15) (1) .30 .25 .10 .50 .90 0

accurate, a comparison of rows 1 and 2 of Table 5.3 should show rather different percentages. When rows 1 and 2 are compared, the discrepancy between registering violations is, for the most part, much more pronounced during the early critical trials, with H-L subjects detecting, in some cases, markedly more violations than L-H subjects. 1

Benefit of the Doubt

An implicit assumption of the theory is that subjects in the L-H condition will give more benefit of the doubt 2 to the confederate than will subjects in the H-L condition.

Trials 9 and 17 were apparently not as severe as the design asserted. Examination of the table indicates that they were the least scored critical trials. When these are removed from the analysis the prediction for trials 4 through 14 is completely in the expected direction. Trial 18, however, indicates an unexpected finding: L-H subjects scored more violations than H-L subjects. Even though this finding will be reserved for later discussion, note that there is a minimal discrepancy between the conditions on these trials.

²That is, subjects will tend to doubt themselves and their ability to judge a violation rather than doubt the confederate's ability at the task.

Table 5.4 shows the percentage of subjects in each condition that gave the confederate the benefit of the doubt on all noticed violations. "Benefit of the doubt" here means that the subject, on her scoring sheet, indicates that she has questioned the confederate's word, but deducts nothing, giving the confederate her full score. For example, a subject might have written beside a word on her scoring sheet, "I don't think this is a word," but might have given her opponent a full score despite her doubt.

Table 5.4. Proportion of Total Noticed Violations to Benefit of the Doubt.

Condition	Total Violations Scored	Benefit of the Doubt	Proportion of Total Noticed Violations to Benefit of the Doubt
L-H	45	4	.08
H-L	58	2	.03

Table 5.4 indicates that more than twice as many benefit of the doubt situations occurred in the L-H condition than in the H-L condition. However, caution should be applied when interpreting the significance of these results due to the n in each cell being so small. Although this assumption was not an explicit prediction of the theory, the results do tend in the direction anticipated.

Feelings toward the Confederate

The theory also predicts that subjects in the L-H condition will have less positive feelings toward the confederate than will subjects in the H-L condition.

 $\underline{\text{d.10}}$ The probability of P feeling negative toward 0 in the L-H situation is greater than in the H-L situation.

Table 5.5. Proportion of Subjects with Positive, Neutral, and Negative Feelings toward Opponent.

	Feelings toward Opponent				
Condition	Positive	Neutral	Negative		
L-H	.62	.20	.18		
H-L	.78	.19	.03		

Table 5.5 presents the data related to this prediction. The table indicates that subjects in the H-L condition felt more positive toward their opponent than did subjects in the L-H condition. The table also demonstrates that subjects in the L-H condition felt much more negative toward their opponent than did subjects in the H-L condition. Hence, the data seem to support the prediction. Since much of the literature (such as Berger et al., 1966) indicates that high status actors will be more favorably evaluated than low status actors, the reversed direction of the evaluations in Table 5.5 makes this finding even more significant.

Performance Expectations

Although performance expectations are not directly observable, the questions from the experimental interview permit some indirect measures of whether the subjects did, in fact, initially assign

differential performance expectations to themselves and their opponents. As the theory predicts that performance and procedural expectations are related, it is necessary to determine whether the status manipulation was operative.

In the L-H condition, 18 out of 20 subjects reported that they initially expected their opponent to do better at the task than they would do. One subject said she expected to do equally well because the instructions told her that ability did not make any difference for this test. Two subjects reported "they just didn't know." It would appear from these data that, in the L-H condition, subjects, in general, initially formed higher performance expectations for their opponent than for themselves.

Added support for this acceptance of higher initial performance expectations for the opponent by L-H subjects comes from a serendipitous finding of the study. Although most subjects in the L-H condition won the game by a large majority (they beat the confederate by 489 total points, or an average 24.45 points per subject), only 60 percent of them reported accurately who they thought won the game. This figure is in marked contrast to H-L subjects, who lost the game by a total of -15 to the confederate (or an average of -.75 points per subject); 95 percent of these subjects responded correctly to the question of who they thought won, and only 5 percent were inaccurate. 3

³The fact that L-H actors under some experimental conditions develop high performance outputs has been demonstrated. The theoretical and empirical status of this effect is indeterminate (see, for example, the replication of the Adams and Jacobsen [(1964)] experiment reported to Anderson and Shelly [(1970)] and references cited in their bibliography.) However, the marked difference in performance outputs here seem to indicate that future theoretical work is needed.

Perhaps the reluctance of the subjects in the L-H condition to report they won the game was a function of their initial performance expectations.

The data for the H-L condition concerning initial performance expectations are rather sketchy and difficult to interpret. Only three subjects reported feeling initially that the confederate was going to do worse than they would; the majority of the others were noncommittal. Possibly the question concerning initial performance expectations is not a good measure in this case because H-L subjects' severe losses to someone of lower status, probably unexpected, might have clouded their remembrance of initial feelings. Postexperimental interviews of H-L subjects contain such statements as, "I've never been good at word games," or "high school students are really learning better and faster these days." It is also possible that a college student does not feel she is that much higher in status than a high school student.

Another serendipitous finding may lend support to the contention that subjects felt some connection between performance and procedural expectations. Although of a much more qualitative nature than any of the results reported above, this finding might be fruitful to pursue heuristically. When the subjects were asked if they felt that the confederate cheated at any time during the experiment, the majority in both conditions (17 in the H-L, 18 in the L-H) reported "no." However, of those reporting "no" in the H-L conditions, few subjects elaborated on their reply, while in the L-H condition, many of the subjects gave fuller explanations. The latter also seemed to mention more of the violations, although

it already was reported here that they did not <u>score</u> as many violations as did those subjects in the H-L condition. Below are some examples.

- L-H Subject #1--"No, she was in a hurry and got messed up, but she was not cheating."
- L-H Subject #2--"No, I noticed a couple of times that she put down the same words twice, but it was a mistake. It was not intentional."
- L-H Subject #3--"No, even when I saw a double word I just thought it was a mistake."

Although the above analysis is extremely qualitative, the author suspects that it lends some positive weight to several suppositions. First, performance expectations initially were formed, at least for the L-H condition, and probably for the H-L condition, although the latter is difficult to discern. Second, once these performance expectations were formed, they were fixed. This is more demonstrable for the L-H subjects. It is interesting that in the L-H condition, even when they beat the confederate by a considerable amount, subjects reported that the score was "pretty close." If this second assumption has no validity, there should not be such a high discrepancy between the two conditions in terms of accurate reporting. Third, there is some connection between performance and procedural expectations, although this is less demonstrable from the data. Otherwise, the subjects in the L-H condition would not have differed so much from H-L subjects in terms of lengthier explanations. Of course, this conclusion would have much more weight if the variance between the groups had been much stronger in terms of proportions of yes and no answers. However,

it is suspected that this lack of variation is due primarily to the fact that the violations were moderate, not strong, causing the majority of subjects to report that the confederate did not cheat. This issue will be treated more fully in the discussion section.

DISCUSSION AND INTERPRETATION OF THE RESULTS

The discussion below will be organized according to the following format: responses to violations of expectations, benefit of the doubt, feelings toward the confederate, and performance expectations. Where applicable, suggestions will be made for refinement of the design and the theory.

Responses to Violations of Procedural Expectations: Critical Trial Data

The results shown in Tables 5.1, 5.2, and 5.3 appear quite consistent with the theory's predictions. Those tables indicate that the L-H and H-L subjects differ, and in the directions predicted. The H-L subjects responded to more violations, and earlier, than did L-H subjects.

A possible explanation for the slightly higher reporting of violations on the last two trials in the L-H condition can be suggested. First, as the theory predicts, the L-H subjects, even if they noticed a violation, were more reluctant to report it.

Therefore, a latent reaction might be occurring: When L-H subjects

finally admitted that blatant violations were being committed, they may have felt they had to score a violation as a compensation for all those that they had not scored previously. However, this explanation is tentative because the theory makes no predictions for it and because the discrepancies are minimal on the last trials. Perhaps a more important aspect that this problem points up is improvements that can and should be made in the experimental design. One of these now will be discussed.

Although the researcher cannot determine, in advance, the number of people who will register a violation, some recommendations for future improvements can be made on the basis of the frequency and kinds of violation that were detected during this particular experiment. It would appear that the panel's opinions about the blatancy of a violation, discussed in Chapter IV, are incongruous with the actual results of the experiment. That is, the design was set up according to the supposed blatancy of violations, which was intended to increase over time during the critical trials. The results of this research indicate that the general trend is as predicted, but it does not hold over all trials. It appears that some violations were not sufficiently blatant. Whether or not this is true, the n in some cells is so small that a definite interpretation cannot be offered confidently. For example, the n in trial 17 for the L-H condition is 1, and for the H-L condition, it is 0. Of course, the small number of n's in many of the categories cannot be prevented entirely, since the theory predicts that the less blatant

violations are less likely to be scored, especially in the L-H condition. In conclusion, although the differences between the conditions are in the direction predicted, as mentioned in Chapter III, only "moderate," or what were considered moderate, violations were used. In the future it would be fruitful to run experiments with varying magnitudes of violations. For example, with more or less intense violations, there might be higher differences in responses between the categories on some trials.

Responses to Violations of Procedural Expectations:
The Postexperimental Interview

In the postexperimental interview the question was asked:
"At any time during the experiment, did you think that the opponent
was cheating?" (Although not a test of the theory, it was hoped
responses might lend some heuristic insights.) The replies to this
question were negative and were difficult to interpret. Perhaps
subjects generally were reluctant to use such a strong word as
"cheat" to a stranger or someone of "higher status." If the subjects' responses are taken literally, then possibly the violation
was so moderate that subjects did not perceive that outright cheating was occurring and therefore were reluctant to make a public
allegation. Another explanation is that they simply did not feel
the opponent was cheating. Again, if this was the case, then we

would expect responses to be much more intense to a stronger violation. Future research concerning intensity of violations should help determine the accuracy of these interpretations.

Benefit of the Doubt

Although the data concerning the benefit of the doubt also do not directly test any derivation of the theory, the theory does contain the implicit assumption that people of lower status will give more benefit of the doubt to people of higher status than people of higher status will give to those of lower status. This assumption is one of the bases for the predictions that L-H subjects will be slower to react overtly to a violation of an expectation and that they will react to fewer violations. In other words, subjects in an L-H condition will form higher performance expectations as well as higher procedural expectations for their opponent than will H-L subjects, and L-H subjects therefore will be more likely to question themselves than an opponent of higher status.

Table 5.4 illustrated that L-H subjects gave the benefit of the doubt to their opponents more often than did H-L subjects. Again, however, the n in each cell is small, and although the trend is in the direction anticipated, the data would be far more reliable if the cell number were higher. Further research might include, as a part of the experimental design, opportunities for subjects to give the benefit of the doubt to their opponents. For example,

subjects might be instructed that, in the scoring process, if they have any doubts and are not sure whether or not to score a word, they can put a question mark beside it; however, the choice about awarding points would remain solely their decision.

Feelings toward the Confederate

The data shown in Table 5.5 supported the prediction that L-H subjects will feel much less positive toward their opponents than will H-L subjects. Although data analysis indicated that L-H subjects did feel six times more negative toward the opponent than did H-L subjects, it is entirely possible that this difference will increase with increased violation severity. Future research could indicate whether or not this prediction is valid.

An unexpected finding was that L-H subjects had significantly higher performance output than did H-L subjects, which might affect the data. In the L-H condition, many subjects won the game by a significant amount, but they generally were very reluctant to report this fact. In other words, the initial performance expectations held throughout the game despite the feedback they received to the contrary. It is interesting that the many L-H subjects, with one exception, who reported outcomes inaccurately were those who beat

Note that Berger and associates do not include feedback during the experiment in their work; therefore, the data are not comparable.

the confederate by a large margin. ⁵ (The exception refers to a subject who won by 2 points, but reported that the confederate won.) Examples of their comments in response to this question were: "I scored a little higher, but my opponent won," or "I don't know. I thought it was a tie." These subjects won by an average of 26 points per game. However, other L-H subjects who won by a wide margin did report accurately; these subjects beat their opponents by an average of 60 points per game, which made it extremely difficult for them to report otherwise. (No L-H subjects who lost the game reported they had won.)

As was mentioned, the fact that H-L subjects lost and most L-H subjects won may affect the data. It is possible that those L-H subjects who won unexpectedly and reported that they won would have felt even more negative toward the opponent if they had lost, as they most probably expected to do. The differences, then, between the L-H and H-L conditions might have been even stronger if the L-H subjects had lost as expected. By the same reasoning, the H-L subjects who lost to the confederate, and the majority of them did, probably were not expecting to do so. (Their responses to the question concerning their performance expectations of the confederate appear to support some kind of dissonance

⁵This result indicates even more support for the assumption that initial performance expectations for self and other remain stable throughout the task. Despite evidence to the contrary, when L-H subjects won, they could not report the fact that they did.

reduction about losing.) Therefore, the discrepancy between the two conditions with regard to feelings toward the confederate might have been even greater if the H-L subjects had won as expected, because their reactions to their opponent, had they won, might have been even more positive and less negative. Future research might readjust the task in such a way to ensure that the H-L subjects, in general, do better than their opponents, and the L-H subjects, not as well, in order to obtain a more accurate measure of positive and negative feelings. It is suggested that a better measure would demonstrate that feelings toward the opponent would be even more marked if a subject's initial performance expectations for P' and O were fulfilled.

Performance Expectations

The data support the assumption that the L-H subjects formed initial performance expectations for their opponent and themselves in the direction predicted. They expected their opponent to do better. The data for the H-L subjects were indeterminate, and some possible explanations will be offered.

It is more than likely that the status difference between a college student and a professor, the L-H condition, and a college and a high school student, the H-L condition, is not equal. The researcher was aware of this possibility before the experiment began, but felt that a more equal distance, for example, a high school and a grammar school student, would not be believable to subjects due

to the nature of the task - word construction. The other alternative was to use a high school and a college student for the H-L condition, and an undergraduate and a graduate student for the L-H condition. This initially was rejected on the intuitive ground that college seniors (as some of the subjects were) would not feel a large status differential between themselves and a graduate student, although the author is aware that some experimental studies have used these criteria. In future research it might be desirable to set the experiment up as follows: L-H condition--college student, graduate student; H-L condition--college student, high school student; or L-H condition--college student, professor; H-L condition--college student, junior high school or freshman high school student. One very apparent reason for making this change is that the H-L subjects did not report the initial performance expectations for their opponent that might have been anticipated from the results of other expectation experiments. If the scoring mechanism were not altered (as was proposed in the last section), future research could indicate whether this aberrant H-L reporting of initial performance expectations was due to the dissonance H-L's experienced at losing the game to a status inferior. In other words, did losing cause H-L's to reduce dissonance by not reporting definite initial performance expectations for themselves or other, or was the initial status discrepancy insufficient in the L-H condition to produce differential initial performance expectations?

The connection between performance and procedural expectations, although not directly tested in this experiment, can be inferred from some of the data. (1) The data all point in the direction predicted by the theory, namely, that the higher P's performance expectation for 0, the higher P's procedural expectation for 0. Thus, when 0 violates a procedural expectation, the L-H P will feel less positive toward 0 than if P's performance expectations for 0 were lower than those for P'. (2) Subjects in the L-H condition, as opposed to those in the H-L condition, responded to the question concerning their feelings about whether or not their opponent cheated with much lengthier answers. The author's speculation is that they needed to make congruent their initial performance and procedural expectations by going into lengthy discourse about the impossibility of a higher status person violating a procedural expectation. An alternative explanation would be that they had to "balance" their noncongruent feelings; however, the theory contains no predictions for this speculation.

This chapter first described the inclusion and exclusion criteria that were used to obtain the data for analysis. It then presented and discussed the results and confirmation status of the tested derivations. All derivations were found to be in the predicted direction. Finally, suggestions were made for future theoretical and methodological improvements.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND SUGGESTIONS FOR FURTHER RESEARCH

SUMMARY

The work described here was heavily influenced by the Expectation Theory of Joseph Berger and associates and by Harold Garfinkel's and Peter McHugh's ethnomethodological research on expectation violations.

The influence of the Berger group (1966) revolved around their conceptions, to be discussed below, of performance expectations, external status characteristic, status characteristic, and diffuse status characteristic. In a task situation where P and O are committed to "successful" completion of the task, it is assumed that the actors will feel pressured to determine their relative abilities at the task. These beliefs concerning relative task ability are labeled performance expectations. If P and O differ in an external status characteristic (such as profession or sex), and if these criteria are not directly relevant to the task, but if there are no other available criteria for determining their differential expertise at the task, then beliefs associated with the status characteristic will become the basis for assignment of performance expectations.

A status characteristic stands for an evaluation by an actor that he or she is "better" or "worse" than another actor. However, there are apparently two kinds of evaluations: specific and general or diffuse. First, judgments of specific abilities are concerned with evaluations that are made with respect to specific traits associated with the status characteristic; for example, professors are considered good writers. Second, these specific evaluations become generalized or diffuse; for example, a professor is considered not only a good writer (a specific evaluation), but also to be capable generally. The specific evaluations that become generalized or diffuse represent the abstract definition of a diffuse status characteristic. Because it is assumed that status characteristics determine the assignment of performance expectations, and because performance expectations are supposed to determine the observable power and prestige order of the group, the initial status differences between P and O should come to correspond to the differences in power and prestige between them.

In addition to extending the theory of Berger and associates, this work investigated a new aspect, namely, assumptions about violations of <u>procedural</u> or <u>normative expectations</u>. The latter were

As a variation of the theory and experiment proposed here, it would be substantively worthwhile to determine how far a violator must go in order to break the stability of an established power and prestige order. The theoretical literature, as reviewed in Chapter II, is very divided on this issue.

defined as the beliefs that P and O have for self and each other in terms of their following the task rules. The theory posited that performance and normative expectations are related, and are related in degree: The higher the performance expectations that P holds for O, the higher the normative expectations that P holds for O. The theory also predicted that when a high status O breaks the normative order, a lower status P will respond later, registering fewer occurrences, and less positively to the violation than will a P of higher status interacting under the same conditions with a lower status O.

The other major influence on this work derived primarily from the research of Garfinkel and McHugh on the topic of violations of procedural expectations. However, their efforts lack precision of conceptualization and testable derivations, and an attempt to avoid these shortcomings was made here.

In order to test the derivations of the theory, a laboratory test was designed and executed. The two independent variables were the high or low performance expectations that the subjects held for their opponent, and the procedural expectations that were violated. The two dependent variables were the subjects' responses to violations, and their feelings toward their opponent. Fifty subjects were run in the experiment, 27 assigned randomly to one condition and 23 assigned randomly to the other. Ten subjects were excluded from the analysis since they did not meet the scope conditions of the theory, leaving an n of 20 in each condition. At the beginning of the experiment, subjects were introduced either to a high or low status confederate.

Their task was to play a word game with their opponent which included seven critical trials. These latter were defined as those in which a procedural violation occurred. The proportion of times the subjects in each condition detected and/or scored a violation was considered a measure of their acceptance or rejection of the other's performance outputs.

After the experiment, subjects were administered an adjective test. The proportion of times that subjects responded favorably or negatively toward the opponent, in each condition, was considered a measure of their feelings toward their opponent.

The data demonstrated that the derived predictions tend in the direction expected. Subjects in the L-H condition responded to violations later during the sequence of trials and fewer times, and they felt less positively toward the other than did subjects in the H-L condition.

In addition to the data relating to the major tests of the theory, also discussed were serendipitous findings, interpretations of some unexpected data, evaluation of the experimental setting, and suggestions for future changes in the experimental design and extension of the theory.

GENERAL CONCLUSIONS

Responses to Violations of Procedural Expectations

The data appear to support the theoretical assertions made here. In general, the derived predictions basically were confirmed

in terms of the expected differences between conditions. The following conclusions seem justified:

- (1) The differential performance and procedural expectations that P holds for P' and O seem to produce an observable behavioral difference; and
- (2) the differences between the conditions in terms of reactions to violations of normative expectations are substantial and in the predicted direction.

Recommendations for Revisions of Future Research

A brief discussion of some present design aspects that could be changed and other design possibilities now will be presented.

First, it is possible that the status discrepancy between the H-L and L-H conditions was not equal. Future revisions of the experiment could include changing the status differentials between the L-H and H-L conditions so that they become more equal in their discrepancies. For example, one could leave the L-H condition as it is and make the H-L condition a graduate and high school student.

Second, at present there is no direct measure of the benefit of the doubt phenomenon. The scoring mechanism could be changed so that a more direct measure of any benefit of the doubt that is given could be obtained. For example, subjects could be instructed to put a question mark by a word if they have any doubts about it, but the decision to score the word would be solely theirs.

Third, performance outputs for the conditions were very discrepant and might have influenced the data. The task could be changed so that L-H and H-L subjects do not have such discrepant performance outputs. At present, a way to accomplish this goal is not well formulated by the researcher.

Fourth, the violations did not always reflect an increase in magnitude. From the data we have here, the violations could be altered to reflect more accurately any desired increase in intensity of violations.

Fifth, the design could be changed in order to test the following assumption: The less expected a behavior, the stronger the reactions to it. One way to accomplish this would be to run two different experiments with L-H and H-L subjects. In one the instructions could include ways to deal with violations, for example: "If you are unsure of your opponent's words you need not score them," or, "There is no cheating allowed. If one of you perceive cheating behavior you are not to give your opponent any score for that trial." The other could include no instructions on cheating, as was the case with the experiment presented here. Comparison of the results from these two experiments should yield some data on the assumption stated above.

Finally, various procedural rules and their differential effect could be incorporated into the design. This is both a design and a theoretical problem since the \underline{kind} of procedural rule that is

violated needs to be precisely defined to ensure the validity of generalization concerning reactions to violations of procedural rules.

Recommendations for Future Extensions of the Theory

In reference to the above, the theory could attempt to determine which procedural rules actors consider weak, moderate, or strong. Can murder and cheating at a game be considered equal violations? More abstractly, will different populations differentially evaluate loadings of importance in different procedural rules? Some of the deviance and cross-cultural literature indicates that different populations do just that.

What effect do positive violations of procedural expectations have upon people? Some distributive justice formulations attempt to deal with this issue, and a modification of the theory suggested here could be of use in answering this question.

An extension of the theory also could include the role of possible positive or negative sanctions. Will different sanctions modify a subject's response to violations? Another aspect would be the relevance of the violation to the subject. For example, if a high status violator steals a pen from a low status subject, but the subject has a free, indeterminate supply of pens, would the subject react as strongly as to a more "relevant" violation?

The theory might be extended to explain the discrepant performance outputs between the two conditions. For example, an assumption could be added stating that the L-H subjects will have higher performance outputs than H-L subjects because they will perceive a need to work harder at the task.

The theory could take into account the significance of the "source." For example, how important is a significant other, the significant other being the violator, and what effect does the significance of the source's relationship to the subject have in terms of determining responses to violations of procedural rules?

Another aspect that merits attention deals with the duration and nature of a relationship. What effect does the length and kind of relationship have on reactions to violations? Would the fact that a relationship is a longstanding one mitigate reactions to violations? Would a husband and wife and a student and a professor react differently to the same violation? Would someone's reaction to a violation by a stranger differ from his reaction to a violation by an acquaintance?

Perhaps the most interesting extension of the theory, both substantively and in an applied sense, would be to determine how various violations affect a relationship over time, that is, does the relationship qualitatively change? The results could be related to such variables as duration and nature of the relationship.

The theory could be extended to include sex differences.

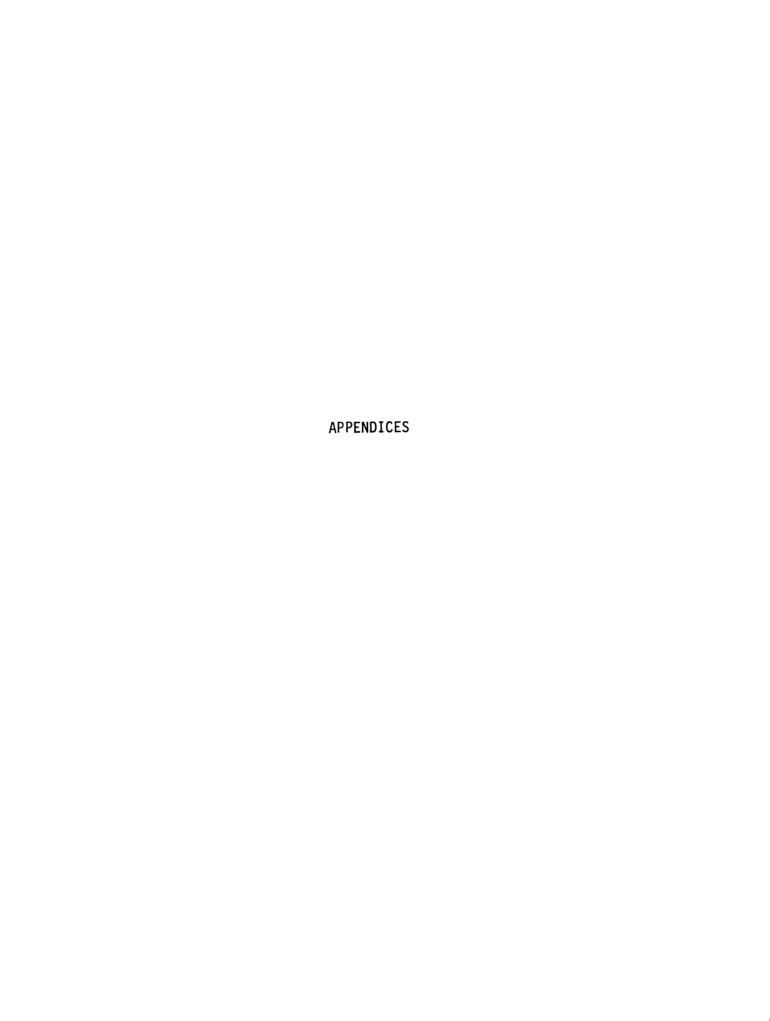
Will reactions to a violation differ if the offender is female or
male? Is there a "combining mechanism," as Berger and Fisek (1970)

suggest, that will mean, for example, that a high status female will

not receive the full status of her position because a female usually carries a low status designation? Berger and Fisek postulate that in this situation the statuses will combine. Would a reaction to a violation differ if the violator were a female of high status as opposed to a male of high status? An interesting sidelight here is that a few of the subjects in the L-H condition mentioned that they knew their opponent was a female professor, but they kept wanting to think of her as a male.

Finally, in order to clarify the divided literature on reactions to high status violators, a future assumption of the theory might deal with the relationship between the degree of a violation emitted by a high status person and the eventual breakup of a stabilized power and prestige order. In other words, ask the question: At what point in an established interaction can a high status violator lose the "benefit of the doubt" that he or she has accrued?

The research presented here is in an embryonic state. So little study has been done on this topic that incorporation of the recommendations mentioned above should be a slow, but very rewarding, endeavor. The researcher believes that relationship problems, such as those between husband and wife, employee and employer, and student and professor, frequently stem from violated expectations.



APPENDIX A

COMPLETE EXPERIMENTAL PROCEDURES

APPENDIX A

COMPLETE EXPERIMENTAL PROCEDURES

Experimental Instructions

Host greets S and leads S to her seat. S is told that she is number 1 and that she will be playing with an opponent who is designated as number 2. She is told to watch and listen to the television in front of her.

(Host thanks S and leaves and shuts the door)

(Experimenter's voice starts)

Hello, I am a member of the research team of social scientists who are conducting this study. We would like to thank you for joining us today. We hope that you will find this to be an interesting experience.

We and other social scientists are currently conducting a large number of studies to find out whether groups using new kinds of communication equipment can work as well together as do face-to-face groups working on similar problems. Today you are participating in one of these studies. The two of you will work on a series of problems, and you will communicate to each other about the solutions to these problems by way of the communication network we have designed. The closed circuit television we are using now is a component of this system.

First, let us introduce you to each other. (S and C are shown to each other). Participant number 1 is in an undergraduate program at Michigan State University. Participant number 2 (show appropriate film according to condition) is a professor at the University of Michigan (for L-H condition) a student at Lansing High School (for H-L condition).

(Pause 15 seconds)

(Fade video)

(Dialogue begins again)

The task that you are about to start is labeled by social scientists the "Word Cognitive Ability Test." It involves being able

to construct as many words as you can within a limited time period from the letters which are projected on the screen. We find that the ability is a <u>unique</u> (stress unique) attribute of an individual and that, for instance, abilities such as verbal ability or mechanical ability do not determine the person's success at the task. We also know that other specialized abilities like being good at mathematics and having artistic talent are also <u>unrelated</u> (stress unrelated) to word cognitive ability.

We are now ready for the experimental instructions. You are about to participate in a study of problem solving in two-person groups. The task involves your viewing letters on the screen in front of you and generating as many words as possible from the letters contained on the screen. A letter can be used in each new word as many times as the letter appears on the screen during that trial. Suppose that the screen contains the following letters: A, B, C, D, E, F, G, H, I, T. (flash letters) From these letters the following words could be constructed: (show words) HIT, HAT, BAD, BET, BAIT, and so forth. (fade video) You are allowed to list any words which you can think of (show rules) except foreign words, abbreviations, slang words, words which would ordinarily be capitalized, and plurals. (fade video)

Please look at your desk. On the desk you will find a pad labeled "Word Sheet." (show word sheet) Throughout the experiment you will record your words on this pad. When the buzzer goes off in your room you will have forty seconds to copy down the letters from the screen onto your word sheet and make up as many words as possible from these letters and list them one under the other. (point to words on the word sheet, illustrating with a pencil that they are written one under the other) In the place provided for this on the word sheet, (point to words on word sheet) please print all words so that they are easily readable (point to legibily written words) for your opponent. (fade video) Please look at the pad now for a few seconds and acquaint yourself with this procedure. (pause for 10 seconds) (dialogue resumes) When the buzzer goes off the second time this means that you are to stop writing the words and put your word sheet on the designated area of the desk so that you can see each other's sheets on the television screen. Simply detach each sheet from your pad and put it in the box. (illustrate detaching the word sheet and putting it in the box) It is important that you place the word sheet with the bottom facing the camera to your left and leave it there. (illustrate with a pencil pointing to the bottom of the sheet and the bottom of the box) This will allow the camera to transmit the information on your word sheet to your opponent. (fade video) Look at the desk and the taped area which reads "Word and Communications Sheet." (pause 5 seconds) As soon as the buzzer goes off to signify the trial is over put your sheet in this box. Again, this will allow you to see each other's words so that you can score them.

The scoring process will begin when your opponent's words appear on the screen. Please start this phase by recopying the letters for that trial onto your scoring sheets. (illustrate the copying of letters onto the scoring sheet) (fade video) This is necessary because we are interested in discovering the average number of possible words that can be made up from the different letter combinations. After copying the letters from the screen, you will copy your opponent's words onto your scoring sheet (illustrate the copying of words onto the scoring sheet), compute her scores, and enter the total score for your opponent on your scoring sheet. (point to the scoring column and the place for opponent's score on scoring sheet) Please take a few seconds to look at your pad called "Scoring Pad." (fade video) (pause 15 seconds)

Notice on your scoring sheet that only three-letter words and above are allowed and that three-letter words equal 1 point, four-letter words equal 2 points, five-letter words equal 3 points, six-letter words equal 4 points, and seven-letter or more words are worth 5 points per word. (point to scoring box on scoring sheet and point to the word and points columns starting with three and ending with seven) (fade video) Remember you are not allowed to make up words with less than three letters in them.

To avoid confusion please do not turn the pages of any of the scoring sheets, either backwards or forwards, until the appropriate trial comes up. Look only at the sheets relevant to the trial you are working on.

When you have completed the total score for your opponent you will write her score on the communications sheet and put it in the box labeled "Word and Communications Sheets." (point to communications sheets, rip one off of the pad, and put it in the "Word and Communications Box") Look at your desk for a few seconds and locate the communications pad. (pause for 5 seconds) (fade video) Please use a new communications sheet on each trial. The communications sheet is simply placed over the word sheet. It is placed directly over where the words are written. (illustrate placing communications sheet directly over the words on the word sheet) It is important for you to place your communications sheet and word sheet within the appropriate taped area on the desk and facing the camera to your left so that the camera can pick these communications up and transmit them to your opponent. Again, please make sure that your sheets face the camera. (point to sheets facing camera) (fade video)

After your opponent has scored you, your score will appear on your television screen, and you are to enter it on your scoring sheet so that you will have a record of how both you and your partner did on each trial. (point to place on scoring sheet where S is to enter her own score) (fade video) The entire scoring process

will take one minute. The scoring process starts as soon as you see your opponent's word on the screen and ends with a buzzer ringing twice. The next trial will begin when the buzzer rings again.

Please use sheets consecutively. In other words, for Trial I use word sheet number I and score sheet number I, etc. (point to both sheets) (fade video) For reference, the word and scoring sheets have a summation of the rules that we have already talked with you about. Notice that there is also a summation of the allowable word rules on your desk. (point to summation of allowable word rules) (fade video)

You are to use the pen that is provided for you on the desk. All words are to be legibly printed.

To avoid confusion, please do not turn the pages of any sheets, either backwards or forwards, until the appropriate trial comes up. Look only at the sheets relevant to the trial you are working on.

Again, please use the scoring sheets consecutively and fold them over after each trial is completed. Do not detach these sheets. (emphasize)

There are two things which make this task very important to social scientists. We know from previous studies that the capacity to make up as many words as possible within the time allotted is <u>not</u> (emphasize not) necessarily related to specialized skills that the individual might possess, such as mechanical, artistic, verbal, or mathematical ability. That is, those people who might have high skills artistically, mathematically, mechanically, or verbally are not necessarily better at this task than anybody else. Secondly, the success at this task seems to be dependent on a <u>unique</u> (emphasize unique) ability of the subjects to work under the time allotted and their ability to intuitively discern patterns.

Before we start some practice trials let us review the procedure. When the buzzer goes off you should start, and when it goes off again forty seconds later you should stop and start to score your opponent, then enter the score on the communications sheet, put your communications sheet in the box, and enter your score on your own score sheet.

You are scored on speed, accuracy, and quantity of words that you make up. The person who wins the most points wins the game. At the end of the twenty trials the experimenter will collect your scoring pads and compute your total scores in order to determine who won the game. This information will be given to you later.

In this particular experiment you are in separate and identical rooms with no communication link between the rooms; hence, if you talk you will not be able to hear each other. Remember, only words which contain three letters or more are allowed. You are not allowed to use foreign words, abbreviations, words which are normally capitalized, slang, or plurals. Also remember that you can only use each letter from the screen once in each word that you make up, and you can only use the letters on the screen from the trial that you are working on to make up your words. (show rules again) (fade video)

Let us try a few practice trials. These two trials will <u>not</u> (emphasize not) count on your score. Notice that the two top word and scoring sheets are labeled "Practice." Use these for your practice trials. When you hear the buzzer begin.

(Buzzer)
(Show letters)
(Wait forty seconds)
(Buzzer)
(Show practice confederate words)
(Score subject)
(Put subject's score in box)
(When sixty seconds have elapsed buzz twice)
Let us practice once more.
(Repeat above)

Are there any questions? If there are please press the buzzer in your room on your desk and an experimenter will assist you.

(Experimenter goes into subject's room whether they press the buzzer or not and asks if there are any problems or questions. Experimenter checks the experimental material to make sure that they are following directions. Experimenter says "All right" and leaves and shuts the door)

(The twenty trials are conducted in the same sequence as reported above)

(When the experiment is over, the experimenter enters subjects' room, collects their materials, and gives them a semantic differential test to fill out. They are told to open their doors when they have finished with it)

WORD SHEET

A B C

1. FORM WORDS FROM LETTERS ON SCREEN FOR 40 SECONDS

COPY LETTERS FROM SCREEN

FORM WORDS BELOW

- 2. TO BEGIN SCORING DETACH AND PLACE THIS SHEET IN BOX.
- 3. NOW PROCEED TO SCORING SHEET.

SCORING SHEET

A B C

SCORING INSTRUCTIONS

COPY	LETTERS	FROM	SCREEN	

1. COPY OPPONENT'S WORDS BELOW

- 2. SCORE OPPONENT'S WORDS USING TABLE ON THIS SHEET.
- 3. MULTIPLY NUMBER OF WORDS BY POINT VALUE, E.G., 3 (NO. OF WORDS)
 X 1 (POINT VALUE FOR A THREE-LETTER WORD) = 3.

WORDS	POINT VALUE	NO. OF WORDS	POINTS
3 LETTER	1 PT.		
4 LETTER	2 PTS.		
5 LETTER	3 PTS.		
6 LETTER	4 PTS.		
7 AND MORE LETTERS	5 PTS.		
TOTAL			

OPPONENT'S SCORE	
YOUR SCORE	

АВС	Experimenter 1
	Postexperimental Interview
(Host ent	ers and collects test)
(Host lea	ds S to debriefing room)
Tha	nk you for completing the test.
study before	ould like to talk with you about your reactions to today's ore we discuss the results of the study. There are factors ct the results, and I want to talk with you about some of
Your firs	t name is? (pause)
And what	is your major field of study?
And your	age?
1.	In general, what are your feelings about the study? (probe)
2.	How did you feel about your opponent? Why?
3.	How did you feel about the task? (probe)
4.	Have you ever participated in a study like this before? (if yes, probe for a description of the study)
5.	Have you ever read or heard about a study like this one before? (if yes, probe for a description of the study)

6.	How well did you expect to do on the "Word Cognitive					
	Ability" task before you actually began taking it?					
	Why?					
7.	At the same time, how well did you expect your partner to					
	do? Why?					
8.	Can you guess what the specific purpose of the experiment					
	was?					
9.	Can you guess what the hypotheses of the experiment might					
	have been?					
10.	Who do you think won the game?					
11.	Did you notice anything unusual about the experiment?					
	(probe, if appropriate)					
12.	There was deception in the experiment. Can you guess what					
	it was? When did you come to					
	that conclusion?					
13.	At any time during the experiment, did you think that your					
	opponent was cheating?					

A B C Experimenters 1 2 3 4					
Posttask Questionnaire					
Instructions: The following page contains a standard rating scale. Your task is to use the scale to rate <u>your reactions</u> to a concept. This may be a difficult task, but please do your best even if it means guessing on the scale. All ratings will be kept in strictest confidence. Instructions for using the scale appear below. Thank you for your cooperation.					
An example of the kind of scale which appears on the following page is the following:					
PLEASANT X ::: UNPLEASANT					
If you think that the concept that you are rating is <u>extremely pleasant</u> , you are to mark an "X" in the appropriate extreme interval of the scale, as illustrated above. Conversely, if you feel that the concept is an <u>extremely unpleasant</u> concept, then mark the scale in the extreme interval at the other end of the scale, as illustrate below:					
PLEASANT:::: X : UNPLEASANT					
Alternatively, if you think that the concept that you are rating possesses an intermediate degree of that characteristic, then check the appropriate intermediate interval of the scale. For example, if you think that the concept is quite pleasant, although not extremely so, then check the scale as follows:					
PLEASANT: X :::: UNPLEASANT					
Or, if the concept seems only <u>slightly pleasant</u> , an interval closer to the center of the scale would be checked:					

The <u>center interval</u> should be checked only when the words at the two ends of the scale describe your feelings toward the concept <u>equally well</u>, or when the scale is completely <u>irrelevant</u> to the characteristics of the concept being judged.

PLEASANT ___: __: X : ___: __: UNPLEASANT

Please work through the scale as rapidly as possible. Make only one mark on each scale. We are interested in your first impressions on the scale, so please don't delay unduly on any one item. On the other hand, please don't be careless, because your judgments should be as accurate as possible. Please answer every item, and always put your "X" directly over an interval (as illustrated above). Please turn to the next page and begin work.

ON THIS PAGE, PLEASE RATE YOUR OPPONENT DURING THIS STUDY.

PLEASING	 :	::	·:	:	:	:	ANNOYING
KIND	 :	::	:	:	:	:	CRUEL
STRONG	 :	·:	:	:	:	:	WEAK
FAIR	 :	::	:	:	:	:	UNFAIR
POSITIVE	 :	::	:		:	:	NEGATIVE
FAST	 :	·:	:	:	:	:	SLOW
CLEAN	 :	::	:	:	:	:	DIRTY
HAPPY	 :	:	:	:	:	:	SAD
LARGE	 :	:	·:		:	:	SMALL
GOOD	•					•	RAD

Debriefing

Now I would briefly like to explain in a little more detail what we are trying to study in the tests today. We are studying the effect of how people react to unexpected events. To set up this type of situation we need to arrange your interactions with your opponent. In the "Word Cognitive Ability" test, we were interested in your reactions to your opponent. Her answers were arranged so that she would be giving unexpected answers some of the time. We are interested in your reactions to her behavior. Is this clear so far?

This, briefly, is the reason why we had to arrange the experiment this way. If you had expected her behavior we would not have found out the information that we were interested in. Since the study involves some fictions we would greatly appreciate it if you did not tell anybody about it. They might be tested later, and, as you can see, such information would greatly change the way they perform and therefore the experiment could not be involved in our data collection. Can I have your word that you won't disclose this information? (pause) If anyone asks you about the test, it is all right to tell them that it was a test concerning word formation. But don't tell them about the rest. O.K.?

Thank you very much.

Obviously, because your opponent's answers were arranged, no one really won the game.

(Ask question 13 on postexperimental interview)

We will pay you two dollars for your participation today. (Thank subjects again and give cash and receipt)

APPENDIX B

PROCEDURE FOR RECRUITMENT OF SUBJECTS

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PROCEDURE FOR RECRUITMENT OF SUBJECTS

Speech for Laboratory Study

Would you like to earn money as a participant in a sociology lab study?

An instructor in the sociology department is looking for participants for a laboratory study that is being conducted this term. The study will take approximately 1-1/4 hours of your time, and you will be given \$2.00 for your participation.

The study should be a learning experience for the participants involved, and it involves no danger or physical pain.

If you would like to participate and earn \$2.00, please sign up on the sheet that is being distributed. We would really appreciate your participation.

Thank you.

AD IN PAPER AND ON BOARDS

NEED FEMALE STUDENTS FOR SOCIAL PSYCHOLOGY STUDY

EARN \$2.00

FOR APPROXIMATELY AN HOUR OF YOUR TIME

CALL 353-5179

Hi.

This is the sociology laboratory. I'm sorry you have to be answered by a machine, however, there's no one here right now. If you're calling in regard to the study please leave your name and phone number when you hear the beep, and we'll get in touch with you.

Thank you for your response.

Scheduling

Hello, may I speak to (<u>first and last name</u>), please?

Hello (<u>first name</u>). I'm calling from the sociology laboratory. You indicated an interest in participating in one of our studies on the form that you filled out in your sociology class.

Are you still interested?

I will need some information before I can schedule you. What is your major? (If it is sociology or psychology, thank and) Have you ever participated in any sociological or psychological experiments before? (If yes) Could you tell me about it? (If it was a deception study, thank her and tell her that you might be scheduling her for a study in the future, not this quarter, and hang up)

Fine, we have an opening on (<u>Day</u>) at (<u>Time</u>). Can you make it then? (If no) We have another opening on (<u>Day</u>) at (<u>Time</u>). Can you make it then? (If no again) What times are possible for you? (As soon as she mentions a time that is acceptable, stop her and place her in it)

The experiment will take place in 300 Berkey Hall. All right? Fine, then we'll see you on (\underline{Day}) at (\underline{Time}) in 301 Berkey Hall.



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