Consistent and Inconsistent Social Characteristics and the Determination of Power and Prestige Orders*

by

Joseph Berger
Stanford University

M. Hamit Fisek
Stanford University

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Consistent and Inconsistent Social Characteristics and the Determination of Power and Prestige Orders

It has long been known that previously established status characteristics act as important determinants of the emergent power and prestige order in small task-oriented groups (see, for example, Torrance, 1957; Katz, Goldston and Benjamin, 1958). Previous research specifically directed to this problem has shown that the resultant task behavior of the group members who are differentiated on a single status characteristic or evaluative dimension, external to the group's task, will reflect their relative states of this characteristic: group members with the highly evaluated state of the differentiating characteristic will exercise greater influence on the task outcome that those with the less highly evaluated state of the characteristic. This has been demonstrated to occur when the differentiating characteristic is of a diffuse nature, such as educational level and military rank, whether or not this characteristic is initially relevant to the group's task (Moore, 1968; Cohen, Berger and Zelditch, forthcoming). It has also been demonstrated to occur when the differentiating characteristic is a specific social characteristic instrumental to the group's task (Berger and Conner, 1969).

In explaining these and related results, Berger and Conner (1969) argue that the members of task-oriented groups come to develop through time stable conceptions of the performance capacities of each other. These conceptions, or performance expectations, are beliefs about the relative task abilities of individuals that the members of the group come to hold. Typically these expectations will be differentiated; that is, they will be conceptions of inequalities in the task abilities of the group members.

If differentiated, these performance expectations legitimate and determine differences in the power and prestige positions that develop in the group: inequalities in opportunities to perform, in performance rates, in evaluations of members' contributions, and in the relative influence of the different members on the decisions of the group. In this sense the group's ordering of power and prestige positions is said to be a function of a structure of performance expectations its members come to hold. In the situation where the members of a task group are differentiated in terms of a diffuse status characteristic (age, sex, occupation, etc.), such differentiation provides a basis in terms of which these performance expectations are formed. That is, distinctions in task expectations come to coincide with the evaluational distinctions on the status characteristic (Berger, Cohen and Zelditch, 1966). In the case where the members of a task group are differentiated in terms of a specific social characteristic, task expectations are provided by the performance conceptions already associated with the social characteristic. Thus, through its relation to performance expectations, differentiating social characteristics (diffuse or specific) determine the ordering of power and prestige positions in the task-oriented group.*

An obvious extension of this line of research is to the problem of multi-characteristic status differentiation--that is, to the situation in which the members of the task-oriented group are differentiated on two or more social characteristics, each of which is instrumental to their task,

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*For an application of the expectation argument to the situation where the members of the task-oriented group are not initially differentiated in terms of a specific or diffuse social characteristic, see Berger, Conner and McKeown (1968) and Fisek (1969).

and each of which carries information on expected performance capacities. The determination of power and prestige orders appears to be a straightforward matter when the distribution of two or more social characteristics is consistent--that is, when the members of the group possess similarly evaulated states of the characteristics each of which is providing congruent information about an individual's performance capacities. In this case the power and prestige order of the group should be a direct function of the distribution of the states of the characteristics. The relationship between the group's power and prestige order and its differentiating social characteristics appears much less clear, however, when the distribution of these characteristics is inconsistent. This is the situation where at least one of the members of the group possesses dissimilarly evaluated states of the characteristics and these are providing incongruent or contradictory performance information, e.g., that an individual has "high" performance capacities and at the same time "low" performance capacities with respect to the group's task. Here we may ask how the actors cognitively define such inconsistencies, and what are the consequences of such definitions for their behavior in the group. This is the theoretical issue with which we are concerned. Putting the matter more generally, we may state our problem as follows: Given that the members of a task-oriented group are differentiated on two or more socially valued characteristics instrumental to their task and which are allocated in a consistent or inconsistent manner, how will the members of such groups form performance expectations, and how will these expectations be related to the group's power and prestige order?

In the next section a theoretical structure is developed within which our problem is restated, and what appear to be at least two alternative answers are formulated. We then present an experiment designed to discriminate between these alternatives, and then evaluate these theoretical alternatives in the light of our findings.

Theoretical Considerations

To facilitate our analysis of this problem we shall conceptualize it in terms of a simplified theoretical structure. Although this theoretical structure is simplified, we believe it contains those elements that are important and relevant to the processes with which we are concerned.

We imagine a group containing two or more actors. However, we view the group from the point of view of one actor, say p. Strictly speaking, the other actors are objects of orientation to p. For purposes of experimental study we confine our attention to two persons, p and o.

P and o are engaged in the solution of some task, which for simplicity we view as having only two outcomes, "success" or "failure." The task may be almost any kind of activity involving a series of contributions or problem solving attempts by one or more of the actors. Moreover, the members of the group are committed to the successful completion of the task, and it is both legitimate and crucial for them to take each other's behavior into account in order to achieve this outcome. In this sense, the group is "task focused," and its members are "collectively oriented" in solving their problem.

We assume that there exist in this situation a number of specific social characteristics. A characteristic, C, is some aspect or property of an individual that might be used to describe him. For C to be a social characteristic, we require that it consist of at least two states which are differentially evaluated in terms of honor, esteem, desirability. For C to be a specific social characteristic, specific performance expectations must be associated with its states. These are beliefs about how an individual possessing a given state of C will perform in defined or specified task situations. For example, mathematical ability may function as a specific social characteristic. We distinguish different levels of this characteristic, we associate differential social values to these levels (positive and negative), and we associate beliefs about the different performance capacities of individuals possessing the different states of the characteristic. Again for purposes of simplifying our analysis, we assume that there exist just two such characteristics in our situation, C_1 and C_2. Each characteristic involves two states that are differentially evaluated--one positively and the other negatively--and associated with these states are the beliefs that individuals possessing them also possess, respectively, "high" and "low" performance capacities with respect to a task for which these characteristics are relevant. In the situation of interest to us, we assume that it is given that p and o know that they are differentiated (possess different states) with respect to C_1 and C_2, that these social characteristics are relevant to their task, and that they are of equal weight. Within this framework we can now consider how different distributions of the states of these social charac-

teristics are related to different possible power and prestige orders that might emerge in the group.

The first case to be considered is that involving a consistent distribution of the states of the characteristics. Here the states of the characteristics possessed by each individual have the same or consistent evaluations. That is, all positively evaluated states are possessed by one individual, and all negatively evaluated states are possessed by the second. As already noted, this case would appear to present no new theoretical issues when compared with the situation in which there is a single characteristic (diffuse or specific) which differentiates the members of the group. We assume that given two or more differentiating social characteristics relevant to the group's task, if these characteristics are allocated in a consistent manner, their effect on the group's power and prestige order will be similar to that of a single differentiating characteristic. The actor who possesses the positively evaluated states will hold a higher position on the power and prestige order than the actor who possesses the negatively evaluated states. The first individual will receive more action opportunities, make more performance outputs, be more likely to have these positively evaluated, and exercise more influence than the second individual.

The case where there is an inconsistent distribution of differentiating characteristics is considerably more complex. This is the situation where at least one of the group members, p or o, possesses states of the characteristics that do not have consistent evaluations--for example, p possesses the positively evaluated state of C_1 and the negatively evaluated state of C_2. Here the actor has two bases for forming his performance

expectations, and these are providing contradictory information. The information provided by one characteristic is that p has a "high" performance capacity relative to o on this task, while that conveyed by the second is that he has a "low" performance capacity relative to o on the task. We assume that p comes to cope with this problem, and that through the operation of some particular cognitive mechanism he comes to form performance expectations that enable him to effectively interact in the situation. Further, we assume that the cognitive mechanism that operates to determine the formation of performance expectations in this case will also be operative in the situation where the distribution of social characteristics is consistent. Thus in determining which mechanism operates in the case of inconsistent distributions, we are trying to determine more generally how expectations will form in situations in which two or more social characteristics are task-significant.

On theoretical grounds, two alternative modes of cognitively defining the situation seem possible. The first, which we shall call a "balancing" mechanism, is based on some of the general ideas to be found in the literature on cognitive consistency theories (Heider, 1946; Newcomb, 1953). Applying this line of thinking to our problem, we reason that the actor p will tend to cognitively balance his situation so as to form performance expectations for self and other that correspond with a distribution of states of characteristics that is consistent or univalent for each individual. In the case where the distribution of the states of characteristics is such that each actor already possesses consistently or univalently evaluated states, p will form his expectations based on the actual distribution of social characteristics. In the case where the distribution of

social characteristics is inconsistent, p is expected to cognitively alter the situation. For example, if p possesses the positively evaluated state of C_1 and the negatively evaluated state of C_2, we might find him using only one of these social characteristics as the basis on which he forms his task expectations. Or, he might decide that the information regarding the inconsistent characteristics is erroneous, and that he in fact possesses states with similar evaluations. The particular manner of balancing the situation, such as the two just considered, is likely to depend upon the context of the specific situation. However, what is important is that according to this line of reasoning, the actor will form expectations that correspond to a perceived distribution of states that is consistent or univalent for each individual. Consequently, in terms of the conditions of our problem, where only two states are distinguished on C_1 and C_2, different distributions of these characteristics will result in p's forming one of two expectation states for self and other--either "high" or "low." Through the operation of the balancing mechanism, different distributions will be reduced to a unique balanced structure.*

The second mode of cognitively defining the situation that we consider is one which we shall refer to as a "combining" mechanism. The ideas involved here are loosely associated with those from information and decision-making theories. According to this mechanism, the actor essentially operates as an information processing system, taking into account

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*More generally, this argument leads us to expect that the number of different expectation states p can form is limited to the number of differentially evaluated states distinguished on the social characteristics possessed by the members of his group.

all information available to him as regards the relevant social characteristics and the task in the situation. Thus in forming expectations for self and other, p will use the information provided by both characteristics. In a manner which we cannot as yet precisely describe, he will combine the performance information given by each of these characteristics in forming resultant expectation states. In the case where p is confronted with a consistent distribution of equally weighted social characteristics, the resultant expectations that he forms will simply reflect the "high" and "low" performance conceptions associated with the states of these characteristics. In the case where p is confronted with an inconsistent distribution of these states--say, a group member has "high" performance capacity on C_1 and "low" on C_2, the resultant expectation he will form is for some state lying between "high" and "low": an "average" level state. Thus under this mechanism, the combined expectations that p will form for self and other can assume a large number of different values ranging from "high" to "low" and depending on the particular distribution of the characteristics in the situation.

Since there are no clearcut theoretical grounds to favor one or the other of these cognitive defining mechanisms, we have designed and conducted an experiment to enable us to discriminate between them. The experiment was designed to correspond with the simplified theoretical structure developed in this section.

The Experiment

The experimental situation consisted of two phases. In the first phase we created two specific social characteristics and assigned states

of these characteristics to two subjects. In the second phase, we put the subjects in a standardized experimental situation where we could measure each subject's likelihood of being influenced by the other subject. This measure of influence was used as the indicator of the power and prestige position of the individual in the group.

Upon their arrival at the experimental laboratory, the subjects were led to separate rooms and given two written tests. These tests were designed to establish two fictional abilities or specific social characteristics on which the subjects could be differentiated. One test, called the "Meaning Insight Ability" test, was said to measure "meaning insight," a basic ability of the individual. This test contained fictional word association problems which involved matching an English word with the supposed phonetic spellings of two non-English words from a language unknown to the subjects. For each problem, the subject was asked to determine which of the two non-English words had the same meaning as the English word. The other test, called the "Relational Insight Ability" test, was said to measure "relational insight," another basic ability. This test also contained word association problems. These involved matching the supposed phonetic spelling of a Japanese word with two "ancient Japanese ideographs." For each problem, the subject was asked to determine which of the two ideographs had the same pronunciation as that given by the phonetic spelling, independent of their meanings. Each of the tests contained twenty problems. Prior experience with these tests show them to be sufficiently vague and yet believable to enable the experimenter to induce a subject's belief and confidence in almost any score. Thus they provide an efficient means for creating and randomly

assigning states of specific social characteristics.

Having completed the tests, the subjects were led to the experimental room and seated in individual booths. Once seated, the apparent purpose of the experiment was explained. They were told that they would be working on a group decision-making task. The task, called a "Contrast Sensitivity" task, involved the visual judgment of a series of slides. Each slide consisted of two rectangular patterns, one above the other, and each pattern was composed of a different arrangement of small black and white squares. The problem, they were told, was to decide for each slide which of the two patterns, the top or the bottom, contained the greater area of white. Like the two ability tests, this task was also constructed to be ambiguous, so there were no right answers; both patterns in each slide contained the same area of white. Previous standardization work with the task indicated that the actual probability of picking either pattern was approximately .5 for each slide (Ofshe and Simpson, forthcoming). To control for any lack of homogeneity between stimulus slides, the order of presentation was randomized by selecting a random starting stimulus for each group while the actual sequence was maintained from experiment to experiment.

The social characteristics were introduced by telling the subjects that since they would be working together as a group, it would be helpful for them to know as much as possible about each other. They were told that the purpose of the tests they had taken earlier was to provide them with this information. In order to establish relevance between the social characteristics and the task, Meaning Insight Ability and Relational Insight Ability were represented as being highly correlated with Contrast

Sensitivity and with each other. They were told that people with high Meaning Insight and high Relational Insight ability usually do quite well on the Contrast Sensitivity problems, and people without these abilities usually do poorly. Furthermore, in an attempt to make the two abilities seem equally relevant, the tests themselves, in terms of their intrinsic properties, were constructed so as to be quite dissimilar from the Contrast Sensitivity task.

At this point the subjects' scores on the two tests were reported to them. The reporting of the scores was the main experimental manipulation--in fact, the only experimental manipulation which was used to create different conditions. We created three different conditions on the basis of the reported scores. Conditions I and II, which we designate as HH-LL and LL-HH (the first two letters indicate the states of C_1 and C_2 that p possessed, and the last two letters indicate the states that o possessed), were run simultaneously. In each group one subject was assigned to the HH-LL condition and the other to the LL-HH condition. This assignment was random. In these groups the subjects were told that one of them (the subject assigned to the HH-LL condition) had gotten a score of 18 out of a possible 20 on the Meaning Insight Ability test and a score of 19 out of a possible 20 on the Relational Insight Ability test, while the other subject (the subject assigned to the LL-HH condition) had gotten a score of 9 on the Meaning Insight Ability test and a score of 8 on the Relational Insight Ability test. These scores were interpreted for the subjects in terms of a chart of national standards. A facsimile of this chart is reproduced in Figure 1 below. Thus the scores of the HH-LL subject were defined as superior scores, and the

scores of the LL-HH subject were defined as poor scores.

FIGURE 1

Test Standards

16 - 20	Superior
11 - 15	Average
0 - 10	Poor

In Condition III, which we designate as HL-LH, both members of the group were given inconsistent score patterns. The scores reported showed that one of the subjects had scored 18 on the Meaning Insight Ability test and 9 on the Relational Insight Ability test, while the other subject had scored 8 on the Meaning Insight Ability test but had scored 19 on the Relational Insight Ability test. These scores were reported as being "unusual" to the subjects. The particular inconsistent score patterns were randomly assigned.

In performing the Contrast Sensitivity task, the procedure was for each subject to give an initial opinion of the correct answer, to be able to see the other person's initial opinion, and then to make a final decision. The subjects were told that this exchange of information on initial opinion was part of the group decision-making procedure and might be helpful to their own solutions of the problems. Actually, this exchange was controlled and was built into the experiment to provide the opportunity for exercising influence. All communication

between the subjects occurred through the panels of an interaction control machine. One of these panels was located on each of the subjects' desks, and it allowed the subject to indicate his initial choice by pressing one of two buttons, to subsequently see the other person's initial choice on a signal light, and to indicate his final decision. These panels also allowed an experimental assistant in a separate room to control the information on the other person's choice. That is, the subjects could be made to see an agreeing or disagreeing initial choice from the other person independently of the other person's actual choice.

The experiment was run for twenty-five trials or Contrast Sensitivity slides. Twenty of these trials were controlled disagreements or "critical" trials in which both subjects thought they were disagreeing with each other. The five agreement trials were also controlled; these were randomly distributed for each group, with one agreement included in each successive block of five trials. The reason for this high proportion of disagreements was to force the subjects to differentiate themselves on task performance.

After the experiment, the subjects were given a questionnaire to fill out. Upon completion of the questionnaire, they were taken to separate rooms and extensively interviewed. The purpose of the questionnaire and interview was to determine the effectiveness of the experimental manipulations and to gather information on the cognitive sets of the subjects at the end of the experiment.

A total of 91 subjects took part in the experiment. These were all male students from local junior colleges. They were recruited on

a volunteer basis and were paid for their participation. Of the total number of subjects taking part in the experiment, 15 have been eliminated from the analysis of the results. These subjects were excluded for violating one or more of the initial conditions of the experiment, as determined in the post-experimental questionnaires and interviews. The following criteria were used as bases for exclusion:

1. Suspicion: If a subject became suspicious of any of the experimental manipulations he was eliminated from the sample. This category also included subjects who had previously read about deception experiments and thought the present experiment similar to them, and also subjects who had heard from others that the study involved deception.

2. Extraneous bases of differentiation between subjects: If any particular set of circumstances provided a subject with a basis of differentiation between himself and the other apart from the experimental manipulation, then he was eliminated from the sample. Thus, all visible minority group members were eliminated from the sample. Previous acquaintance between the two group members also resulted in their being eliminated from the sample.

3. Failure of experimental manipulations: Subjects who were unable to understand the instructions, who were confused as to what was happening in the experiment and/or did not understand crucial parts of the instructions such as the relation of the tests to the Contrast Sensitivity task, were eliminated from the sample.

Of the total, 76 remained in the sample: 26 in the HH-LL condition; 26 in the HL-LH condition; and 24 in the LL-HH condition.

The predictions and results for these subjects are presented in the following section.

Predictions and Results

Our measure of an individual's power and prestige position was the rate at which he accepted influence, given a disagreement with other. This was operationalized as the proportion of "stay-responses" made by a subject over the twenty critical trials of the experiment. A subject's response was coded as a "stay-response" if his final decision was the same as his initial choice, and was coded as a "change-response" if his final decision coincided with his partner's initial choice. What are the specific predictions which follow from the balancing and combining arguments for the different conditions in this experiment?

The argument for the balancing mechanism for this situation is that all subjects will hold either high expectations for self and low for other, or low for self and high for other; and these will correspond with a perceived distribution of states of characteristics that is consistent or univalent for each individual. Power and prestige positions will then be directly determined by these expectation structures. For subjects in the HH-LL or LL-HH conditions consistent distributions of states of characteristics are already given for each individual in the situation. The expectation structures which respectively correspond to these distributions are high-self, low-other and low-self, high-other. Consequently, we would expect subjects in the HH-LL condition to be less influenced and thus have

a higher rate of stay-responses than subjects in the LL-HH condition. If the balancing argument is correct, subjects in the HL-LH condition would also form expectations that correspond to a perceived distribution of states of characteristics that is consistent or univalent to each individual. For this to occur, these subjects would either select only one of the characteristics as a basis for their expectations or by cognitive distortion perceive the characteristic states possessed by each individual as having the same value. In either event, individual subjects in this condition would form either high-self, low-other or low-self, high-other expectation structures. Thus we would expect individual subjects in the HL-LH condition to have a rate of stay-responses similar to subjects in either the HH-LL or the LL-HH condition. Ideally, if the balancing mechanism were also operating in a uniform manner for the HL-LH subjects, we should find the overall proportion in the inconsistent condition approximating the proportions in one of the two consistent conditions. However, since this may not be true, and we have no way of predicting the direction of the cognitive balance taken by inconsistent subjects--either to forming high-self, low-other or low-self, high-other expectation structures--we might find the overall proportion of stay-responses in the inconsistent condition diverging from the proportions in the consistent conditions. To the extent that the divergence occurs, however, we would definitely expect to find bi-modality--that is, some subjects with response rates similar to the HH-LL subjects, and others with response rates similar to the LL-HH subjects.

For the multi-characteristic situations in which the distribution

of states is consistent, HH-LL and LL-HH, the combining mechanism argument leads to the same predictions as those of the balancing mechanism. Under the assumptions of this argument, the individual uses all the information available concerning the distribution of states of characteristics in forming expectation states for self and other. These expectation states are an "average" or some combining function of states of characteristics he and the other possess. Thus in the situation where the information conveyed to the individual is that he is high on two equally weighted characteristics and the other is low on these characteristics, the HH-LL condition, the individual is expected to form a high-self, low-other expectation structure. Similarly, under this argument the individual in the LL-HH condition is expected to form low-self, high-other expectations. Again assuming that the individual's power and prestige position is a direct function of his expectation structure, we expect to find a higher rate of stay-responses for individuals in the HH-LL condition as compared to those in the LL-HH condition. However, for subjects in the HL-LH condition, the predictions from the combining mechanism argument are markedly different from those we were led to by the balancing mechanism argument. In this condition subjects are expected to form expectation states that combine the information that they are high on one characteristic and low on a second equally weighted characteristic. The result is that the subject holds expectations for an "average" performance level relative to the task--somewhere between high and low. Therefore, the expectation structure for subjects in this condition should be "average" for self and

"average" for other. Again assuming that the individual's power and prestige position is a direct function of his expectation structure, this argument leads us to expect that the overall proportion of stay-responses for these subjects will be markedly different from those in the HH-LL or LL-HH conditions, and in fact should be in between the rates in these conditions. Further, this line of reasoning leads us to expect that the distribution of the number of stay-responses per subject should be uni-modal and similar to the distributions in the other two conditions. In short, the combining argument predicts that the HL-LH condition will be characterized by a rate of stay-responses that is peculiar to itself.

The experimental results are presented in Table 1. This table shows the proportions, mean number of stay-responses, and variances for subjects in each of the three conditions.

Table 1 about here

To begin with, it is to be observed that the data presented provide clear support for the primary prediction, common to both the balancing and combining arguments, that the rate of stay-responses for subjects in the HH-LL condition will be greater that the rate of stay-responses for subjects in the LL-HH condition. The actual proportion of stay-responses averaged for all subjects in the HH-LL condition is 0.82, as compared to 0.53 for subjects in the LL-HH condition. The difference is strikingly large. Application of the Mann-Whitney U test gives the probability of obtaining this difference on the basis of chance alone as considerably less than

Table 1

Proportion, Mean Number of Stay-Responses, and Variance

Condition	Number of Subjects	Stay-Responses		
		Proportion	Mean	Variance
HH-LL	26	.821	16.42	4.73
HL-LH	26	.661	13.23	5.62
LL-HH	24	.533	10.67	10.23

.001, as reported in the first row of Table 2. It seems reasonable to conclude that when the distribution of states of two specific social characteristics is consistent, this distribution tends to order the power and prestige structure of the group such that the actor who possesses the highly evaluated states of the characteristics is less likely to accept influence than the actor who possesses the less highly evaluated states of the characteristics.

Table 2 about here

Secondly, it is to be observed that the proportion of stay-responses for the subjects in the HL-LH condition is 0.66. This value is almost exactly in the middle of the spread between the values for the HH-LL and the LL-HH conditions. Applying the Mann-Whitney U test to the differences between the HL-LH condition and the HH-LL condition, we get the result reported in the second row of Table 2--that the likelihood of obtaining this difference on the basis of chance alone is considerably less than .001. Application of the same test to the difference between the HL-LH and the LL-HH condition yields the result that the obtained difference could have been produced by chance alone with a probability of less than .05. There seems to be little question that the HL-LH condition produces a different rate of stay-responses than either the HH-LL or the LL-HH conditions. These results are fully consistent with the predictions from the combining mechanism argument: that the rate of accepting influence for subjects in the inconsistent condition will

Table 2

Results of Mann-Whitney U Test
Applied to Differences Between Conditions

Conditions Tested	Test Statistics		
	U	Z	P
HH-LL vs. LL-HH	27.0	5.068	.00003
HH-LL vs. HL-LH	87.5	3.923	.00005
LL-HH vs. HL-LH	123.0	2.805	.02270

differ markedly from the rates of either of the consistent conditions, and that this rate in fact will be in between the rates of the other two conditions.

This analysis, however, does not completely eliminate the balancing mechanism argument. This argument admits the possibility that the direction of cognitive balance may not be uniform and that some subjects in this condition may balance in the direction of forming high-self, low-other expectations while others balance in the direction of forming low-self, high-other states. If this occurred, the resultant mean proportion of stay-responses for these different types of subjects could turn out to be an average of the rates found in the consistent conditions. However, if this did occur, there should be evidence for it in the distributions of stay-responses in the inconsistent conditions.

Looking at the variance of the number of stay-responses, as reported in the fourth column of Table 1, we see that the variance for the HL-LH condition is 5.62. Although this value is larger than that for the HH-LL condition, which is 4.73, this difference cannot be considered striking. Indeed, comparing the variance of the HL-LH condition with that of the LL-HH condition, which is 10.23, we see that it is considerably less than that obtained for this particular consistent condition. In order to examine additional data relevant to this problem, we present in Table 3 the frequency distribution of the number of stay-responses for all three conditions.

Table 3 about here

Table 3

The Frequency Distributions of the
Number of Stay-Responses Per Subject

Number of Stay-Responses	HH-LL	HL-LH	LL-HH
4			x
5			
6			x
7		x	xxxx
8			x
9			x
10		x	x
11		xxx	xxxxx
12	xx	xxxxxx	xxx
13	x	xxx	xx
14	x	xxxx	xx
15	xxxxx	xxxx	xx
16	xx	xx	x
17	xxxxxxx	x	
18	xxxx	x	
19	xx		
20	xx		

Examining the data for subjects in the HL-LH case, we find no indications of bi-modality in this distribution. As a matter of fact, the distribution for the HL-LH case and the distribution for the HH-LL case look remarkably similar. The only change between the conditions seems to be a linear transformation of the mean.* Thus we find no support for the argument that the observed rate of stay-responses is due to an aggregation across two populations of subjects balancing in different directions.

We conclude that the data obtained from this experiment clearly favor the combining mechanism argument. The subjects of this experiment do indeed seem to be operating on the information given to them about the states of the specific social characteristics each of them possesses in forming task expectations for self and other in such a way as to use and combine all the information that is available to them. Thus in the case where the distribution of the states of the characteristics is inconsistent they tend to combine the states of the two characteristics so as to form "average" states.

There is one point worth noting as regards the generality of this conclusion. The inconsistent case we have investigated is both inconsistent and "symmetric." It is symmetric in the sense that looking at each actor separately we find that he possesses one

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*Since all the subjects in the LL-HH condition were placed in a consistent low state to begin with, the relatively high variance in this condition cannot be taken as evidence for the balancing mechanism argument insofar as it applies to the problem of multiple characteristics. Rather, this high variance is believed to reflect the tension and resulting unstable behavior produced by the cumulative effect of the two low ability manipulations employed in this condition.

positively and one negatively evaluated state. Further, it is symmetric in the sense that the distributions for the two actors are "mirror images" of each other. It is conceivable that while the balancing mechanism does not operate in this case, it does operate where there already exists some status "edge" or advantage that provides a particular direction along which balancing can occur. Such a situation would be inconsistent and nonsymmetric: one in which all the group members do not possess a matched and equal number of positively and negatively evaluated states. We are at present conducting a study to determine what are the properties of emergent power and prestige orders in such situations.

Summary

We started our investigation with the problem: Given that the members of a task-oriented group are differentiated with respect to two or more social characteristics instrumental to their task, how is the distribution of these characteristics related to the group's power and prestige order? A theoretical analysis of this problem led us to the issue of how expectations are formed, and in particular how they are formed when the distribution of social characteristics is inconsistent. We have considered two alternative mechanisms which may be operating in the formation of expectations in multi-characteristic task situations. The first, which we have referred to as a balancing mechanism, postulates that the actor cognitively defines the situation so as to form expectation states that correspond with a perceived distribution of states of characteristics that is consistent or univalent for each individual.

For the situation we considered, the operation of this mechanism would result in p's assigning one of two expectation states to self and to other--either "high" or "low." The second cognitive process we considered is one we have referred to as a combining mechanism. This postulates that the actor forms his expectations by combining or averaging the performance information contained in the states of the social characteristics possessed by self and other. For our situation of concern, the operation of this mechanism would result in p's assigning to self and to other one of a large number of different expectations ranging from "high" to "low" and depending upon the particular distribution of social characteristics. In any event, once p has formed expectations, whether through the operation of a balancing or combining mechanism, his power and prestige position is assumed to be directly determined by his self-other expectation structure.

We designed and conducted a study, built around a standardized experimental situation, in an attempt to discriminate between the two alternative mechanisms. The study consisted of two phases, in the first of which we established and assigned the states of two specific social characteristics to two actors, who in the second phase were put in a standardized experimental situation where we could measure the power and prestige ordering that developed. The experiment consisted of three conditions: In the first condition (consistent), a subject who was high on both characteristics was paired with one who was low on both characteristics; in the second condition (consistent), a subject who was low on both characteristics

was paired with one who was high on both characteristics; and in the third condition (inconsistent), a subject who was high on one characteristic but low on the second was paired with one who was low on the first characteristic and high on the second. The balancing and the combining mechanisms make different predictions as to the behavior of subjects in the third condition.

The results of our experiment clearly conform to the predictions made from the combining argument. The rate at which subjects in the inconsistent condition accepted influence was significantly different from and in between the corresponding rates for subjects in the consistent conditions. It is also clear that this is not due to aggregating results over subjects who were behaving in radically different ways. We conclude that our experimental results strongly support the combining mechanism argument with the following reservation: It may be that a situation involving a symmetric distribution of characteristics is a special one with particular properties. We are now in the process of investigating this phenomenon in a situation involving non-symmetric distribution of the states of the characteristics in order to determine whether this is indeed the case.

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