ETHNICITY AND INTERPERSONAL INFLUENCE:
An Expectation States Approach

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Abstract

This thesis examines the relationship between ethnicity and perceived competence within the framework of status generalization theory. The theory holds that status characteristics which are significant in the larger society (e.g., sex, age, ethnicity) come to affect expectations of performance and actual performance outputs in task oriented groups. Ethnicity was chosen as the independent variable, and "White" and "East Indian" constituted the values of the variable. The study was initiated in order to determine the effect of ethnicity (as operationalized) on the amount of influence accepted and the performance standards applied to self and other.

The thesis outlines the theory and the scope conditions under which it applies. As well, evidence is provided to substantiate the claim that ethnicity is a status characteristic in Canada and that, in particular, persons of East Indian origin are considered to be of low status. The results of two related experiments are discussed, the first examining the effects of ethnicity alone, and the second examining the combined effect of ethnicity and performance on the dependent variables identified. The findings of Experiment One show some support for the prediction that East Indians are perceived as less competent than Whites. However, the effect of the variable is not as strong as predicted. As a further indication that the variable (as operationalized) lacks strength, the effects of ethnicity are eliminated with the introduction of equal and average scores in Experiment Two. Contrary to expectations, gender differences are evident in both experiments.
# Table of Contents

List of Tables .................................................................................................................. v
List of Figures .................................................................................................................. vii
Acknowledgements .......................................................................................................... viii

Chapters:

- **Introduction** .................................................................................................................. 1
- **Status Generalization Theory** ....................................................................................... 4
- **Ethnicity As A Status Characteristic** ........................................................................... 14
  - (i) Stereotypes .................................................................................................................. 14
  - (ii) Ethnic Hierarchies ..................................................................................................... 20
- **East Indians in Canada** .................................................................................................. 26
- **Methodology** .................................................................................................................. 35
  - (i) Experiment One ......................................................................................................... 36
  - (ii) Experiment Two ........................................................................................................ 42
- **Results and Analysis** ..................................................................................................... 46
  - (i) Experiment One ......................................................................................................... 46
  - (ii) Experiment Two ........................................................................................................ 61
- **Conclusion** ..................................................................................................................... 74
Bibliography ................................................................. 81

Appendices:

Appendix A: Recruitment Form .......................................... 92
Appendix B: Consent Form ................................................ 93
Appendix C: Demographic Form ........................................... 94
Appendix D: Instructions to Participants ............................... 96
Appendix E: Two-Pattern Contrast Sensitivity Task ............... 104
Appendix F: Questionnaire A – Experiment One .................... 105
Appendix G: Record of Influence ........................................ 111
Appendix H: Questionnaire B – Experiments One and Two ....... 112
Appendix I: Post-Experimental Interview .............................. 120
Appendix J: Debriefing Form ............................................. 125
Appendix K: Secrecy Commitment Form ............................... 127
Appendix L: Computer Printout of Scores ............................ 128
Appendix M: Questionnaire A – Experiment Two .................. 129
Appendix N: Rules for Exclusion ........................................ 136
List of Tables

1. Table 4.1: Overview of Experiment One ................................................................. 38
2. Table 4.2: Overview of Experiment Two ................................................................. 44
3. Table 5.1: Estimated Score For Self and Other (Experiment One) ......................... 47
4. Table 5.2: Number of Subjects Reporting Themselves To Be "Confident" or "Very Confident" – Questionnaire A and Questionnaire B (Experiment One) .................................................. 51
5. Table 5.3: Number of Subjects Reporting the Task To Be "Important" or "Very Important" – Questionnaire A and Questionnaire B (Experiment One) .................................................. 53
6. Table 5.4: Motivation, Interest and Involvement – Questionnaire A and Questionnaire B (Experiment One) ................................................................. 54
7. Table 5.5: Rejection of Influence By Condition (Experiment One) .......................... 56
8. Table 5.6: Mann–Whitney U Tests on P(S) [adjusted for ties] – Experiment One ........ 57
9. Table 5.7: Standards Applied To Self and Other By Condition (Experiment One) ........ 58
10. Table 5.8: Mann–Whitney U Tests on Standards Applied To Self and Other [adjusted for ties] – Experiment One ................................................................. 58
11. Table 5.9: Number of Subjects Reporting the Task To Be "Difficult" or "Very Difficult" – Questionnaire A and Questionnaire B (Experiment Two) ......................... 65
12. Table 5.10: Number of Subjects Reporting Themselves To Be "Confident" or "Very Confident" – Questionnaire A and Questionnaire B (Experiment Two) ......................... 65
13. Table 5.11: Number of Subjects Reporting the Task To Be "Important" or "Very Important" – Questionnaire A and Questionnaire B (Experiment Two) ......................... 67
List of Figures

1. Figure 3.1: The Population Distribution of Persons of Indo–Pakistani Origin in Canada – 1981 ........................................... 28
2. Figure 4.1: Linkage Between Ethnicity, Performance and Expectations ........................................... 43
3. Figure 5.1: Performance of Self – Questionnaire A (Experiment One) ........................................... 48
4. Figure 5.2: Performance of Other – Questionnaire A (Experiment One) ........................................... 49
5. Figure 5.3: Overall Ability of Other – Questionnaire A (Experiment One) ........................................... 50
6. Figure 5.4: Overall Ability of Other – Questionnaire B (Experiment One) ........................................... 50
7. Figure 5.5: Confidence in Partner – Questionnaire B (Experiment One) ........................................... 52
8. Figure 5.6: Performance of Self – Questionnaire A (Experiment Two) ........................................... 63
9. Figure 5.7: Performance of Other – Questionnaire A (Experiment Two) ........................................... 63
10. Figure 5.8: Overall Ability of Other – Questionnaire A (Experiment Two) ........................................... 64
11. Figure 5.9: Overall Ability of Other – Questionnaire B (Experiment Two) ........................................... 64
12. Figure 5.10: Confidence in Partner – Questionnaire B (Experiment Two) ........................................... 66
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Introduction:

The concept of "ethnicity" has attracted considerable attention in Canada, both in the press and in the academic literature. As Mackie and Brinkerhoff assert, "it would be difficult to exaggerate the significance given to ethnicity by Canadian scholarship, mass media and ethnic group spokespersons" (1984:99). To a large extent, this attention is justified insofar as Canada is a multi-cultural and multi-ethnic society. The nation has been populated by repeated and diverse waves of immigration, and ethnic enclaves have formed in various regions of the country.

Descriptions of the ethnic diversity of Canadian society range from Kelner and Latowsky's pedestrian analogy to the "salad bowl" (1971) to Porter's "vertical mosaic" (1965). Although terms such as 'pluralism' and 'assimilation' have replaced 'mosaic' and 'melting pot' in the academic literature comparing Canada with the United States, the comparison between the ethnic diversity of the former and the cultural homogeneity of the latter continues to be made. Supposedly, we as Canadians demonstrate a greater tolerance for ethnic diversity than do our southern neighbors. Indeed, the preservation of a multiplicity of ethnic groups and interests is touted as a positive aspect of Canadian society, and has been embodied in an official policy of multiculturalism.1

However, there is an underside to this focus on ethnic diversity. As Burnet points out, "while the policy of multiculturalism is not intended to foster the retention of ethnic and racial animosities and adverse ethnic and racial stereotypes, it is possible that it may do so inadvertently"(1975:39). In extreme cases, ethnic intolerance may be expressed in the form of racial discrimination and violence. More subtle and insidious is that ethnicity becomes a means of social location and status in society. As Hiller suggests, "much of the group diversity within Canadian society is based on the rigid, ascribed characteristics of race, language and ethnic tradition rather

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1The policy of multiculturalism in a bilingual framework was first announced on October 8, 1971 by Prime Minister Pierre Elliott Trudeau.
than on achieved characteristics" (1976:104). And as Porter (1965) and others have argued, one's opportunities for achievement as well as one's status in society may be closely tied to one's ethnic or racial background (see Porter, 1965; Clement and Olsen, 1974).

A note of clarification is necessary at this point. For the purposes of this research, the terms 'race' and 'ethnicity' will be used interchangeably. It is recognized that a distinction between the two concepts is often made in the social sciences, with 'race' referring primarily to distinguishable physical characteristics, and 'ethnicity' referring to an individual's sense of belonging to a particular group. Nonetheless, there is no consensus among social scientists as to the essential components of either concept. It is argued that the use of the terms in conjunction with one another is justifiable in the context of the present research. The study focusses upon the members of a 'visible minority' whose physical characteristics are likely to lead others to assume their membership in a particular ethnic group, whether or not this is actually the case. In other words, racial characteristics will lead to assumptions about ethnic group membership.

The issue of ethnic status constitutes the focal point of this research, and concern lies with determining what effect ethnic status may have in small group interaction. The question to be addressed is:

Under what circumstances does ethnic status have an effect in interpersonal processes?

More specifically, when is ethnicity used to infer competence? In responding to these questions, the theory of status generalization will be employed, and an experimental approach will be utilized. The objectives of the thesis are as follows:

1. To outline the essential elements of status generalization theory, and to provide a brief discussion of studies within this theoretical framework which have examined the effects of ethnicity.

2. To introduce the notion of "performance standards" and discuss this in the context of status generalization theory.
3. To substantiate the claim that ethnicity is an instance of a status characteristic in Canada, and

4. To present and discuss the results of two experiments using ethnicity as the independent variable and interpersonal influence as the dependent variable. Focus is upon the relations between Whites and East Indians in Vancouver, British Columbia. Both experiments draw upon and contribute to status generalization theory.

The significance of the research derives in part from the importance of ethnicity in Canada. The emphasis placed upon the preservation of a multiplicity of cultures and ethnic groups in Canadian society necessitates the exploration of the extent to which ethnicity affects our beliefs and evaluations of others, and our actions toward those others. As well, the research involves the empirical test of a hypothesis embedded in a theoretical context, and contributes to the development of the theory of status generalization. Finally, very little of the empirical research within the framework of status generalization has utilized race/ethnicity as the independent variable. Where the effects of ethnicity have been examined, studies have generally been conducted in the United States and have focussed upon the relations between Whites and Blacks. The research thus constitutes an important addition to the literature on status generalization, and contributes as well to the knowledge of ethnic relations and social inequality in Canada.
Chapter 1:

Status Generalization Theory

The present work is grounded in expectation states theory, an extensive research program that has been developed by Berger and associates (1966, 1972, 1974, 1977, 1980). As a branch of expectation states theory, status generalization is concerned with the way in which status characteristics which are significant in the larger society come to affect expectations of performance and actual performance outputs in task oriented groups. This first chapter outlines status generalization theory and the scope conditions under which it applies. In addition, the concept of "performance standards" is introduced and discussed within the context of this theory. Finally, a number of studies which have examined race/ethnicity within the framework of status generalization are presented.

The first task is necessarily one of definition. Central to the theory of status generalization is the concept of status characteristic. A status characteristic is any attribute of group members around which beliefs about them are formed, and evaluations are made. In other words, a status characteristic is any attribute upon which persons are distinguished and differentially assessed. It should be noted that such characteristics are socially identified and defined. That is, there is nothing intrinsic to a particular attribute that renders it a significant indicator of social position. Rather, those characteristics which are singled out as status giving or status relevant are a matter of social definition. It should also be recognized that the beliefs surrounding status characteristics and/or those who possess them are not necessarily accurate or justifiable descriptions of reality. They are likely to be somewhat stereotypic, and may demonstrate tendencies to overgeneralize.

The ranking of persons possessing certain characteristics is also a matter of social definition. The ranking or identification of high and low status positions is not a function of some
quality inherent in a particular individual or group, but is a matter of cultural definition and relevance. As Rozenholtz and Cohen point out, "a characteristic that is revered in one culture may be treated with disdain in another" (1985:430).

According to the theory of status generalization, status characteristics become the basis of performance expectations, or beliefs about how a person will perform a task in the future. As Bonacich and Light suggest, "people tend to have positive or negative feelings toward different categories of the characteristic, and different expectations about the abilities of people in various categories of the status characteristic" (1978:147). Beliefs about how one (self) will perform are based upon the possession of certain traits, as well as upon how these traits are evaluated in relation to those possessed by the other. It must be stressed that the process of status generalization and the formation of performance expectations involve relations among individuals. That is, the status of both self and other must be taken into consideration. As Berger et al. indicate, "the same individual may be [or be perceived to be] more capable in one setting, of equal ability (to others) in a second, and of less ability in a third; always depending on who the others are" (1977:10–11). More precisely, these expectations of competence depend upon the characteristics the others possess, and how these are evaluated in relation to those possessed by self.

A distinction between specific and diffuse status characteristics must be made. As the name would suggest, specific status characteristics are restricted in their relevance to specifiable situations, whereas diffuse characteristics carry expectations without explicit limitations of applicability. As Foschi and Foddy (1984:1) describe:

...the ability to solve geometrical puzzles is usually seen as applicable to a few situations and is therefore a specific characteristic. On the other hand, characteristics such as social class, gender, or ethnicity are usually diffuse, as they tend to be used to infer a person’s level in a wide variety of abilities.

Often diffuse characteristics come into effect in situations where there is little or no demonstrable relevance to the immediate interaction. In such instances, the burden of proof process is said to be
operative. In the absence of proof that a particular status characteristic is not applicable to a given task, individuals will treat the characteristic as if it were, and status generalization will occur. Expectations will be that "high status individuals will be generally more competent at new tasks than low status individuals, providing the task has not been previously dissociated from the status characteristic" (Rozenholtz and Cohen, 1985:432).

Expectation states theory proposes that the performance expectations of other in relation to self affect the observable "power and prestige order" of the group. This order can be measured in terms of (1) opportunities given to members to perform, (2) actual performances of members, (3) evaluations of these performances, and (4) the amount of influence exerted or accepted by various members. As Berger, Rozenholtz and Zelditch explain, "a position A is higher than a position B in this [power and prestige] order if A is more likely than B to receive action opportunities, make performance outputs, and have performance outputs positively evaluated but is less likely to be influenced in the case of a disagreement with another" (1980:488). If a particular characteristic is an instance of a status characteristic, persons possessing a higher state of that trait should be higher in the power and prestige order than those with a lower state of the characteristic.

At this point the concept of "performance standards" is introduced, as it is proposed that it may constitute a further dimension of the power and prestige order of groups. Work in this area is still in the exploratory stages, and the proposal is primarily based upon the work of Foschi and Foddy (1984). In their paper, the authors present a conceptualization of performance standards, and discuss the importance of this variable in the formation of expectations for self and other.

Foschi and Foddy view performance standards in terms of "rules providing minimum performance requirements to infer either ability or lack of ability" (1984:1). In other words, standards refer to the minimum number of correct answers a person must provide before ability is attributed, and/or the number of incorrect answers given before lack of ability is assumed. The
authors propose that not only does an individual hold expectations for the performance of self and other on a given task, but he/she also maintains standards, and uses these in formulating expectations. Thus, performance standards are held for both self and other, and are used to infer both the presence and absence of ability on the basis of evaluations received. As such, standards can be viewed as an additional component of the power and prestige order of a group.

It should not be assumed that the individual necessarily applies the same standards to both self and other. Rather, "double standards" are often employed. As Foschi and Foddy explain, "in many situations, the standards used by p [self] vary according to the information p has about the performers" (1984:12). The standards applied to other may be either more strict or more lenient than those applied to self, depending upon the information possessed. The authors propose that double standards come to be applied when a diffuse status characteristic is activated, yet the particular conditions under which such standards are employed remain to be investigated.

Status generalization theory is assumed to hold under certain scope conditions or "domains of applicability" (Cohen, 1980:83). The theory applies in task oriented groups, and under the following conditions (Berger et al., 1980; Foschi, Warriner and Hart, 1985):

1. Two persons (self and other) perform a task requiring a single valued ability.
2. The task involves a goal, and participants know what constitutes success and failure in achieving the goal.
3. Subjects are motivated to do well on the task.
4. Subjects are collectively oriented. In other words, the contributions of each group member are believed to influence the success or failure of the group in achieving the goal.

Added to this list is the condition that subjects differ on the basis of at least one status characteristic. In the initial formulation of the theory, it was tacitly assumed that any status characteristic upon which persons were equal would not interfere in the status generalizing process
elicited by the characteristic upon which they differed. However, following the work of Seashore (1968), the scope conditions were reformulated such that the burden of proof principle operates maximally when self and other differ regarding only one status characteristic, and this difference is the only information actors initially have about one another (Berger, Cohen and Zelditch, 1972).

Numerous additional refinements to the theory have occurred as well. The original version dealt with elementary status situations involving only two actors, a single common task, and a single status characteristic. The theory has since been extended to include specific as well as diffuse status characteristics, and to situations involving multiple actors of different types (Berger et al., 1977). Of particular relevance to the present study is the recent work of Zelditch, Lauderdale and Stublarec (1980) who examined the way in which inconsistencies between status and ability are resolved. The authors concluded that when incongruent information regarding status and ability is provided, individuals resolve this by combining the information rather than by favoring one characteristic over the other. Combining occurs even when only one of the characteristics (e.g., ability) is directly linked to the task. Support for this claim can be found in an experiment conducted by Webster and Driskell (1978). The authors examined race and ability, and found that both the diffuse characteristic of race, and the specific characteristic of ability were utilized in formulating performance expectations. Further research by Humphreys and Berger (1981) lead to the proposition that if both positive and negative information is provided, such inconsistent status characteristics may cancel each other out.

A substantial body of research which both extends and lends support to the theory has been generated within this context. Supporting evidence comes from experiments dealing a wide range of status characteristics. For example, the effects of characteristics such as educational attainment (Moore, 1968), gender (Pugh and Wahrman, 1983), age (Freese and Cohen, 1973) and race (Cohen, 1972) have been studied within the framework of status generalization. All
characteristics are assumed to operate in the same manner. The remainder of this chapter focusses upon those studies which have employed race/ethnicity as the independent variable. Regretably, this literature is relatively scant, particularly in the Canadian context. Much of the pertinent research has been conducted in the United States, and has explored the relations between Blacks and Whites. In addition, because of the recent introduction of the concept of performance standards, none of the studies cited is concerned with double standards and the power and prestige order of groups. Although recent work has explored the role of standards in the formation of performance expectations (see Foschi, Warriner and Hart, 1985; Freeman, 1986), these studies have not dealt specifically with double standards and ethnicity. The research reviewed measures aspects of the established power and prestige order such as the amount of influence exerted and/or the actual performances of various group members.

Some of the first relevant work is that of Katz, Goldston and Benjamin (1958), and Katz, Epps and Axelson (1964). Although these studies preceded the initial formulation of status generalization theory by Berger (1966) and in that respect can be considered pre-theoretical, they are nonetheless directly related and deserve mention. Katz and associates examined the interaction between Black and White male college students in a task oriented situation. They discovered that under such conditions, Blacks displayed signs of social inhibition and subordination. Whites tended to make more remarks overall, and persons of both races spoke proportionately more often to Whites than to Blacks. Even when they were matched in intelligence and shown to be of equal ability, Blacks continued to display signs of inferiority. Katz, Goldston and Benjamin proposed that "Negroe–white interaction may profitably be regarded as a special case of interaction between persons of high status and persons of low status" (1958:123).

Since the formulation of status generalization theory, much of the empirical work involving race/ethnicity has been carried out by Elizabeth Cohen. She has developed an extensive program of
applied research, focussing primarily on interactions within educational settings. Cohen combined the work of Katz et al. described above with status generalization theory in proposing the concept of "interracial interaction disability". This idea has become central to her work, and refers to the "tendency for interaction between the races to become strongly related to the race of the participants" (1972:9) in such a way that those with higher status tend to dominate. Those of lower status are left at a marked disadvantage.

In her initial study involving interracial interaction disability, Cohen (1972) examined the relations between Black and White junior high school students involved in a strategy game. She found that Whites were more likely to initiate interaction than were Blacks, and that Whites were prone to be more influential as well. Based upon these results, Cohen was able to conclude that race is an instance of a status characteristic, and this study formed the baseline for future research designed to eliminate interaction disability.

A study carried out by Cohen and Roper (1972) suggested methods for the modification of interracial interaction disability. Again using junior high school boys as subjects, the authors attempted to produce equal status interaction through "expectation training". This involved the introduction of an unrelated task prior to the strategy game, on which low status individuals (i.e., Blacks) were shown to be clearly superior. It was found that when the expectations of both Black and White subjects were thus modified, the resulting behavior approximated equal status interaction. This did not occur, however, when only the expectations of Blacks were raised. Cohen and Roper concluded that "unless the expectations for black competence held by both whites and blacks are treated, whites will continue to dominate the interaction...." (1972:643).

This study was later replicated by Riordan and Ruggiero (1980) with similar results. Of note, however, is that in the replication the treatment of Blacks only resulted in equal status interaction. At the same time, the treatment of both Blacks and Whites resulted in Black
domination. The authors attribute these stronger results to a more extensive expectation training than was used in the original experiment.

Cohen's investigations eventually moved from the laboratory setting to an actual school setting (see Cohen, Lockheed and Lohman, 1976). A special summer school was designed to ascertain whether expectation training would be effective in a school-like context, and to determine whether equal status behavior would persist over time. As well, the effectiveness of two different intervention techniques was compared. The first involved a traditional expectation training task where Black students became the teachers of White students, and were shown to be particularly competent. The second consisted of a learning centre where students were taught by an interracial team of teachers and co-operation was encouraged. On the first measurement, the results showed equal status behavior for students experiencing both treatments (1976:57–8). Over time, a pattern of Black domination occurred for males who had undergone expectation training, while White domination reappeared in the female learning centre. In this instance, expectation training was successful in modifying interaction disability, even when subjects differed in terms of socioeconomic status and attitude toward school.

Cohen also expanded her research to include non-black subjects. In a study involving Israeli youth, Cohen and Sharan (1980) found that "Middle Eastern Jew" and "Western Jew" operated as two states of a status characteristic, with Western Jews holding the higher status (see also Yuchtman-Yaar and Semyonov, 1979). Two expectation treatments were applied, one involving an academic task and the other a non-academic undertaking. Both resulted in equal status interaction. The non-academic task proved somewhat more effective, leading the researchers to surmise that the academic task had activated lower expectations for self in the lower status individuals.
In a study involving Mexican-American students, Rozenholtz and Cohen (1985) found that in an initial experiment where surname operated as a cue to ethnicity, status differences were not apparent. Only when visual cues were operative and when Hispanic students resembled the physical stereotype did White domination occur. In this instance, "in groups where students are physically indistinguishable, the fact of knowing each other's surname is not sufficient as a cue for discrimination to activate the status characteristic of ethnicity" (1985:443). It would appear that in some instances at least, visual cues are necessary to activate ethnic status.

Cohen provides a summary of work relating to interracial interaction disability in an educational setting, as well as a discussion of the interventions which have been introduced (see Cohen, 1982). As well as providing a good overview of the literature (much of which has been discussed above), her summary demonstrates how the research has moved from laboratory settings to natural classroom situations.

One additional study requires mention. Seashore (1968) examined relations between Black and White students, and found no difference in terms of the observable power and prestige order. In a close examination of the design of the experiment, it was discovered that subjects had been informed of both the race and the age of their partner. It was proposed that age might be operating as a diffuse status characteristic which interfered with race. In a replication of the study (Cohen et al., 1969), it was found that when information regarding age was not provided, interracial inequality existed. This led to the reformulation of the scope conditions as previously discussed.

Within the Canadian context, only two studies involving expectation states and ethnicity have been published to date. The first of these is the work of Cook (1974) who applied expectation training to native Indian children. Using a standardized game situation to measure the power and prestige order of the group, Cook found that White children tended to initiate more interaction than did Indian children, and were apt to be more influential as well. Expectation training was
applied with the result that native Indian children became more assertive, and their behavior approximated equal status interaction.

The second Canadian study (Tuzlak and Moore, 1984) looked at the relations between Black and White students in Toronto, and explored the effects of ethnic status and demeanor. Two levels of ethnic status (Black and White), and two levels of demeanor (confident and unconfident) were manipulated. A main effect was found for race, with a marginal effect for demeanor, indicating that ethnicity does operate as a status characteristic.

This chapter has served to outline the theory of status generalization, and to provide an overview of studies of ethnicity which have been conducted within this framework. The studies cited have examined the effects of ethnicity on the performance of group members, and/or the amount of influence accepted. Because of the recent nature of the work on double standards in the context of expectation states theory, none of the expectation states literature has investigated performance standards and race/ethnicity. As well, the paucity of Canadian research, and the scarcity of research examining ethnic relations other than Black/White becomes readily apparent. The following chapter will outline in more detail why researchers should consider ethnicity to be a status characteristic, and will focus upon ethnicity as it is relevant in the Canadian context.
Chapter 2:

Ethnicity as a Diffuse Status Characteristic

While a number of studies examining ethnicity as a diffuse status characteristic were discussed in the previous chapter, few provided a detailed explanation of why ethnicity should be considered as such. In other words, they lacked what Berger et al. refer to as an *instantiation claim*, or an indication that "some particular characteristic is an instance of what we mean by a status characteristic" (1977:23). The following quotation from Cohen and Roper exemplifies the situation in a good portion of the research (1972:644):

Race is seen as an instance of a diffuse status characteristic. Race meets the requirement of the definition of this concept because it is associated in people's minds with a set of specific beliefs involving valued and disvalued characteristics.

What is lacking is substantive support for such claims.

The goal of this chapter is to provide some substantive evidence that race/ethnicity is an instance of a diffuse status characteristic. Recalling the definition of the concept as any attribute of group members around which beliefs about them are formed and evaluations are made (see page 4), focus is upon these two aspects of ethnicity. *Beliefs about* can be translated into "ethnic stereotypes", and *evaluations of* can be subsumed under the heading "ethnic hierarchies". In the effort to place the research in a Canadian context, emphasis is upon Canadian research, although not to the exclusion of all else.

Stereotypes:

It is first necessary to define what is meant by the term 'stereotype', although it must be recognized that no consensus has been reached in this regard. The original use of the term in the present context can be traced to Walter Lippman (1922) who referred to "pictures in the head"
used to organize an individual's perception of the world. He argued that because we have intimate knowledge of only a small part of the world, some system of organization and understanding is required. This can be found in the form of stereotypes whereby "we pick out what the culture has already defined for us" (1922:60). Stereotypes, therefore, affect how we see the world and those around us.

Since Lippman's initial use of the term, a substantial amount of research has been directed toward the refinement of the concept. Nonetheless, as previously suggested, no consensus has been reached concerning the definition. For the purposes of this research, the definition of ethnic stereotypes provided by Mackie (1985) will be used. Stereotypes are described as "those folk beliefs about the attributes characterizing a social category on which there is consensus" (1985:220). The important components of this definition are that stereotypes do not involve scientific knowledge, and they are shared beliefs about groups or categories of people. As well, such beliefs are expressed in terms of a series of traits thought to characterize members of various groups. These descriptive traits may apply to aspects of personality, behavior, and/or to ability and perceived competence. Stereotypes involve generalizations about a person and his/her anticipated behavior which are formed not on the basis of personal knowledge, but rather on assumptions concerning members of the ethnic group to which he/she belongs.

While there tends to be a negative connotation attached to the term, it is important to realize that stereotypes can include both positive and negative traits (or some combination). As well, they may be applied to majority group members as well as to those with minority status. Finally, stereotypes need not be false, although they are inclined to be oversimplifications of reality. They may in fact contain a "kernel of truth". Mackie (1973) discusses the propensity of social scientists to assume the falsity of stereotypes, and argues that empirical support for such an assumption is

2Stereotypes are also based upon other discriminable characteristics such as sex, age or occupation.
noticeably lacking. In a further study, empirical verification of ethnic stereotypes is sought, and Mackie finds "no justification for the inclusion of inaccuracy in the definition of stereotypes" (1974:46). In her study, the accuracy of three stereotypes was assessed against available public records and existing studies. She found that numerous traits which composed the stereotypes could in fact be verified, and that some stereotypes were more accurate than others. Mackie concluded that "accuracy is a variable and further inquiry is required into the conditions under which stereotypes are correct or incorrect" (1974:50). Furthermore, she concluded that stereotypes cannot be considered false by definition. As Gardiner and Kalin explain (1981:155):

This is not to suggest that stereotypes are accurate and sophisticated cognitive descriptions of a group of individuals. . . . But they are often useful characterizations of a group's attributes.

The initial impetus for the development of methodological procedures for the measurement of ethnic stereotypes can be attributed to Katz and Braly (1933). In their study, subjects were provided with a list of eighty-four adjectives, and were asked to select those traits which were believed to be typical of a particular ethnic group. Those traits identified by a significant number of individuals were considered part of the stereotype, reflecting the conception of stereotypes as shared beliefs. However, no consensus has yet been reached as to what constitutes a "significant number" of individuals. As Mackie explains (1978:41):

Although stereotypes have been conceptualized as frequently attributed group traits since Katz and Braly's 1933 study, the literature provides little guidance on the precise amount of agreement which constitutes consensus. Frequencies as low as 3% have been used. On the other hand, had consensus been taken literally (51% agreement), there would have been no traits validated.

Mackie aptly observes that "initial formulations often have a profound influence on subsequent developments simply because they are first" (1985:221). Such is the case with the methodology developed by Katz and Braly. Much of the subsequent research pertaining to ethnic stereotypes has employed the Katz–Braly checklist, or some modification of the instrument. And,
as Erlich and Rinehart (1965) point out, the results have been roughly congruent and have shown a high degree of consensus regarding the traits thought to characterize various ethnic groups.

One consequence of this reliance on the Katz–Braly framework is that studies have tended to focus primarily upon personality characteristics (e.g., "courteousness", "kindness", "arrogance"), and to ignore other shared beliefs about group members. Gardner and Kalin point out that "there is no need to restrict stereotypes to personality characteristics; surely any set of shared beliefs can be important" (1981:155). In the context of status generalization theory, beliefs about competence, ability and/or influence would be particularly valuable. Unfortunately, relatively little research into such aspects of stereotypes exists.

The Katz–Braly method has also been criticized for serving to provoke rather than discover stereotypic responses. That is, some bias is introduced by requiring subjects to select traits from a list provided, rather than propose traits themselves. Studies have demonstrated that when people are asked to select traits from a list provided they will often do so, even if they have little or no knowledge about the group in question. This was most convincingly demonstrated in a study by Erlich and Rinehart (1965) where subjects were asked to select traits which characterized the Alorese ethnic group. A comparison was made between groups using the Katz–Braly check list, and those asked to suggest traits on their own. Even though subjects using the check list could not identify the Alorese and had no knowledge about the group, nearly one quarter of respondents selected traits to characterize them. This was significantly greater than the response rate in the other group. In an effort to overcome this methodological shortcoming, many recent studies have required subjects to suggest rather than select characteristic traits, or have used some combination of open-ended and fixed alternative questions.

A final note regarding stereotypes addresses the issue of negative connotation. Until recently, it was assumed that the holding of beliefs about various groups (i.e., stereotypes), was
necessarily related to negative evaluation of these groups. However, recent studies (Gardner, Taylor and Feenstra, 1970; Lay and Jackson, 1972) have distinguished between the belief component and the evaluational component of ethnic stereotypes. For example, Gardner and associates (1970) measured subject's reaction to the concepts "English speaking people" and "French speaking people", and found that a person's tendency to adopt a stereotype is independent of his/her attitude toward (or evaluation of) the group. In other words, because an individual adheres to certain shared beliefs about an ethnic group, it cannot automatically be assumed that this is tied to his/her evaluation of them. A similar argument is made by Mackie (1973), and empirical evidence is provided in a further study (1974) where she found that even when stereotypes are largely positive, evaluations may be negative, and vice versa. Mackie concludes that "stereotypes and prejudice [i.e., negative evaluation] are not invariably co-existent phenomena" (1974:50). Although the issue remains a controversial one, the weight of the evidence suggests that "the tendency to adopt stereotypes is independent of the attitude the individual may hold toward the same group" (Anderson and Frideres, 1981:60). These findings justify the independent discussion of beliefs about and evaluations applied to various ethnic groups. The issue of differential evaluation will be further explored in the following section.

In concluding the discussion of stereotypes, attention is paid to those studies which have examined perceptions of competence as a component of ethnic stereotypes. As mentioned, the available literature is scant. Of exception is the work of Mackie (1974) where attributes assigned to various ethnic groups included "competent/incompetent work habits", "self-sufficient" and "educated/uneducated". Each of these descriptive terms is related to the notion of perceived competence. Other studies include the work of Aboud and Taylor (1971) and, most recently, a study by Lambert, Mermigis and Taylor (1986). Aboud and Taylor required subjects to rank French and English Canadians on the basis of a number of characteristics including "competent" and
"educated". Lambert et al. assessed the beliefs of Greek Canadian adults concerning a number of ethnic groups. Included in the list of traits were the terms "intelligent" and "hardworking". Although the latter term is undoubtedly related to perceptions of competence, it is unclear whether rating members of a group as hardworking reflects a positive or negative attribution.  

Indirect measurement of stereotypes and competence is found in the work of Kalin and Rayko (1978), and Kalin, Rayko and Love (1980) which examined the evaluation of foreign-accented job candidates. In the earlier study, the authors found that job applicants with accents were rated least favorably for high status occupations, and most favorably for low status occupations. The latter study is a direct extension of the first. Although no distinctions between job candidates was found in the first study, a distinct ranking on the basis of ethnicity (i.e., accent) was found in the second. The findings of both studies reflect perceptions of lesser competence for foreign accented job candidates applying for high status positions. 

The studies cited provide evidence that beliefs about competence and ability are a component of ethnic stereotypes. The scarcity of research examining such aspects reflects a methodological shortcoming as previously discussed. What is significant is that these and other studies demonstrate that people do indeed use stereotypes to perceive and organize the world around them. In other words, stereotypes do not simply exist in the minds and theories of social scientists. Evidence points to some consistency in terms of beliefs about various groups, and some consistency over time as well. In addition, it has been demonstrated that people will continue to use stereotypes even in the face of conflicting evidence (see for example Gardner and Taylor, 1968). As such, ethnicity does meet one criterion of a diffuse status characteristic — it is a trait around which beliefs are formed, regardless of whether or not these are completely accurate depictions of reality.

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3For example, if group members are perceived to be hardworking, it may mean that they are viewed as competent. Conversely, it may mean that they are seen as incompetent, and extra effort is required of them.
As well, such beliefs may include ideas pertaining to competence and/or ability. The remainder of the chapter will focus upon the second criterion of a status characteristic, namely evaluation. The question to be addressed asks whether or not ethnic groups (and consequently members of them) are evaluated differentially and unequally.

**Ethnic Hierarchies:**

The notion of differential evaluation is subsumed under the heading of 'ethnic hierarchies'. The term is used in reference to the preferential ranking of ethnic groups, and this ranking can be based upon a number of different criteria (e.g., power, privilege). The two criteria to be considered here are (i) prestige, and (ii) social distance. Concern lies with the ranking of ethnic groups independent of power and/or occupation.

Once again, focus will be upon ethnic hierarchies as they exist in Canada. It is clear that the possibility of ranking individuals on the basis of ethnicity exists in Canada, primarily because of the nation’s ethnically heterogeneous population. Following the line of argument proposed by Shils (1968), Goldstein explains (1985:182–3):

In societies which are ethnically homogeneous (such as Japan) or in which there has been a great deal of marriage across ethnic boundaries (e.g., Mexico), ethnicity is essentially irrelevant in the allocation of prestige. In societies with a multiplicity of ethnic groups, ethnicity has the potential to be a deference entitlement.

Because Canada is a multiethnic society, the potential for the ranking and evaluation of individuals and groups on the basis of ethnicity exists. This is not to suggest, however, that ethnicity is the only source of prestige in Canada, nor even the most important one.4

With regard to the existence of ethnic hierarchies, let us first examine the measurement of "prestige". Goldstein suggests that "as a facet of social stratification, prestige signifies the ranking

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4For further discussion see Goldstein (1985) pages 191–196.
of positions in a hierarchy of social superiority/inferiority" (1985:181-82), resulting in deference to superiors, acceptance of equals, and derogation of inferiors. Thus, when we speak of prestige, we refer to an intangible sense of social value and worth. Those with high prestige are held in high esteem and are viewed as deserving positive deference. Conversely, those of low prestige are viewed as worthy of derogation. This negative end of the evaluative scale is what Mackie and others have termed "prejudice" (see Mackie, 1985:226).

One of the first studies concerning the measurement of ethnic prestige was conducted by Pineo (1977). Previous work by Porter (1965) examined the effects of ethnicity upon one's position in the occupational hierarchy, but Pineo was interested in determining whether or not an ethnic hierarchy existed distinct from occupational ranking. His was a national sample of French and English Canadian adults, and subjects were asked to judge the social standing of thirty-six ethnic groups. Pineo found that when asked to do so, subjects were able to rank various ethnic groups according to "social standing" and that this ranking existed independent of any occupational hierarchy. The ranking provided by English respondents was such that English, Northern and Western European groups were located at the top of the hierarchy, Eastern and Southern European groups near the middle, and visible minority groups at the bottom of the scale. French and English subjects ranked the ethnic groups differently, with the French ranking all non-French and non-English groups further down the scale. They also disagreed with the English with regard to the placement of their own ethnic group, ranking themselves as equal to the English. However, within language categories there was considerable agreement on the social standing of various ethnic groups. There was also a tendency for respondents to enhance the ranking of their own group in relation to others.

A similar study conducted by Goldstein (1978) examined the evaluations of various ethnic groups by University students in Winnipeg. Rather than have subjects rank ethnic groups names
(e.g., Irish, Greek), thirteen surnames (e.g., Murphy, Georgopoulos) were used as a symbol of ethnic group membership. No direct link between surname and ethnic group was made. Twelve categories were common to both the Pineo and Goldstein studies, and the relative location of each group in the studies was similar (correlation .81). Goldstein suggests that some of the difference might be attributed to regional variation. As well, methodological differences might account for some of the disparity, given that Pineo explicitly stated the ethnic group in question while Goldstein relied upon subjects to attach an ethnic identity to the surname.

Most recently, a study by Breton et al. in Toronto (cited in Goldstein, 1985) examined the evaluations of fourteen ethnic groups. Once again, the British were located at the top of the hierarchy, with visible minority groups at the bottom. According to Goldstein, "the lowest rungs on the prestige ladder were occupied by non–White groups (West Indians, Canadian Indians and Pakistanis) while the top rungs were occupied by the three British Isles groups (English, Scottish and Irish respectively)" (1985:187).

What is notable is that in all three studies a degree of consensus was found, even though subject samples, location and ethnic groups ranked varied across studies. The findings show an overwhelming preference for members of the charter groups, and a prejudice toward members of "visible minority" groups. Following Goldstein (1985), three observations can be made (1985:190):

1. Since most respondents were able to carry out the task of rating the prestige of ethnic groups, and in doing so expressed judgements which revealed differences in the prestige of these groups, it may be concluded that ethnicity is a deference entitlement in this society.

2. The groups with the highest prestige were Euro–Canadians (i.e., the British Isles groups, and North and West Europeans), while non–white ethnic groups and categories (such as native Indians, Blacks and East Indians) enjoyed the least prestige.
3. While self enhancement of ethnic prestige was common, most individuals appeared to have an accurate idea of the amount of respectability accorded to their ethnic group by others. These results support the claim that ethnicity is an instance of a status characteristic (i.e., a trait around which evaluations are made). As well, it is evident that members of visible minority groups in Canada possess a low state of that status characteristic.

A second way of conceiving of ethnic evaluation involves the use of the Social Distance Scale. This seven point scale was developed by Bogardus (1925) to measure the degree of social intimacy persons would allow to members of various groups. The scale ranged from willingness to marry (most intimate) to willingness to allow into the country (least intimate). Bogardus' original study, conducted in the United States, required "mature persons of experience" (i.e., businessmen and teachers) to rank thirty-nine ethnic and racial groupings on the basis of the seven point scale. Three methods of analyzing the data were developed, each resulting in a similar ranking of groups. The first method was the Social Contact Range (SCR), referring to the mean number of social contacts allowed to various ethnic groups. The second was a measure of Social Contact Distance (SCD) or the arithmetic mean of the ratings. The final method was referred to as the Social Contact Quality Index which was determined by assigning numbers ranging from 7 (most intimate) to 1 (least intimate) to the points on the scale, and calculating and averaging the sums. With minor variations in the specific location of various groups, all methods placed the British Isles group (English, Scottish, Irish) at the top of the hierarchy, followed by North and Western Europeans, South and Eastern Europeans, and visible minorities at the bottom.

Numerous more recent Canadian studies have employed the methodology to determine ethnic rankings. And although the methodology is significantly different from that used in studies of ethnic prestige, results have been noticeably similar. For example, a study by Mackie (1974 cited...
previously) required subjects to rank twenty-four ethnic groups, using a Bogardus-type scale. A Social Distance Quotient (SDQ) for each group was determined by computing the arithmetic mean beside the most intimate relationship permitted. The SDQ rankings placed Canadians and British at the top, Europeans in the middle, and visible minorities at the bottom of the scale. Of interest is that the lowest ranking (i.e., greatest social distance) was given to Hutterites, a group which is culturally rather than racially distinct.

Driedger (1982) conducted a study of social distance using students at the University of Winnipeg as respondents. The Bogardus scale was used to assess students’ attitudes toward twenty ethnic groups – ten of European origin, and the remaining ten of non-European descent. Few subjects wished to debar any of the groups from the country, and most were willing to have members of the various groups as friends, neighbors and co-workers. However, a distinction was made between European and non-European groups in terms of marriage. While more than half of the respondents reported a willingness to marry into most of the European groups, considerably fewer (one quarter) showed a willingness to marry into non-European groups. Non-White groups including Japanese, Filipino, East Indian, and Chinese were considered eligible as close friends but undesirable as marriage partners. This was not interpreted as evidence of prejudice, but rather as an indication of the desire to perpetuate ethnic identity through endogamy.

A similar study was conducted by Driedger and Mezoff (1981) with high school students in Winnipeg. The seven point Social Distance Scale was applied to eleven European and nine non-European groups. As with university students, only a small proportion of respondents wished to debar any group from Canada. As well, clear distinctions were made between Caucasians and non-Caucasians in terms of marriage preferences.

Most recently, the data collected by Driedger and Mezoff (above) was compared with Social Distance Ratings generated ten years later in the same city (see Clifton and Perry, 1985).
Fifteen groups were evaluated in the more recent study, and a comparison was made between the thirteen groups common to both investigations. The results suggest that "between 1971 and 1981, students have desired greater social distance between themselves and people of other ethnic groups" (1985:74–75). Both studies show British with the highest ranking, and visible minority groups (with Chinese excepted) rated the lowest. The Chinese were ranked just below the midway point in both studies. In addition, the greatest increase in Social Distance ratings over the ten year period have applied to visible minority groups, namely East Indians, Filipinos and Native Indians. Although the authors are cautious about drawing any definitive conclusions, they report that prejudice appears to have increased over the ten year period.

Both methodologies have demonstrated that Canadians are able to differentially evaluate various ethnic groups. And although some variation is evident, the studies show a tendency to rate the charter groups (English and French) at the top of the hierarchy, and visible minority groups (Native Indian and East Indian) at the bottom. As well, Canadians hold beliefs about ethnic groups and their members in the form of stereotypes. Taken together, this provides substantive support for the claim that ethnicity is a diffuse status characteristic in Canada, and that visible minority groups are generally accorded low status. The following chapter will focus specifically on East Indians, the visible minority group chosen for study. Stereotypes and evaluations of the group will be discussed.
Chapter 3:

**East Indians in Canada**

The previous chapter outlined findings relating to ethnic stereotypes and hierarchies, and these were discussed in relation to the concept of "status characteristic". It was argued that in Canada, ethnicity can legitimately be considered a diffuse status characteristic insofar as it is a trait around which beliefs are formed (stereotypes) and evaluations are made (ethnic hierarchies). The data pertaining to ethnic hierarchies showed a preference (i.e., positive evaluation) for English and European Canadians, and a negative evaluation for visible minorities, with the so-called "invisible minority" groups falling somewhere in between. This chapter focusses on the visible minority group chosen for study, namely East Indians. Concern lies with identifying the specific beliefs and evaluations applied to this ethnic group by majority group members, and outlines the reasons for their selection as a group to study.

The selection of East Indians for this study arose from of the desire to place the research in a Canadian context, and in doing so expand the limited operationalization of race employed in previous status generalization research. As mentioned, the majority of prior studies have examined the relations between Blacks and Whites in the United States. Because of the relatively small population of Blacks in Canada (more specifically, in Western Canada), investigating the relations between Whites and Blacks was not as appropriate in the Canadian context. Interest lay in the comparison of Whites (majority society) with a racial or ethnic minority, but one more prominent in the cultural fabric of Canada. The decision to use a visible minority group (rather than an "invisible" minority) arose from the desire to provide a marked contrast between groups.

As suggested, it was necessary that the ethnic group selected compose a relatively significant proportion of the population. This necessitated consideration of regional variables.
Numerous researchers have identified the significance of region in any study of ethnicity in Canada (see for example Mackie, 1977; Driedger et al., 1982; Frideres and Goldenberg, 1977). Distinct ethnic enclaves have formed in various regions of the country and this demographic factor warrants serious attention. As Hiller points out, "each region in Canada experiences its own ethnic tensions due to the unique composition of its population" (1976:108). This point is further emphasized by Beck who suggests that "...high concentrations of certain immigrant groups in given areas clearly have a major effect on host/immigrant perceptions" (1980:5). Thus, interactions between ethnic groups tend to be mediated by the proportion of the population they compose.

Because the study was carried out in Vancouver, British Columbia, the ethnic composition of this region became important. One of the primary reasons for choosing to examine the relations between Whites and East Indians was the relatively large proportion of persons of Indian/Pakistani origin in British Columbia. According to the 1981 Census of Canada, there were reportedly more than 43,000 such persons residing in the province at that time (see Figure 3.1). This constituted nearly the largest concentration of East Indians in Canada, second only to the province of Ontario. Within British Columbia, most reside in Vancouver or the surrounding lower mainland. Thus, simply in terms of population composition they were a logical group to study.

A second reason is the visibility of this group in Vancouver. This visibility can be considered on two levels. First, East Indians constitute a visible minority group insofar as they are physically (i.e., racially) distinguishable. Secondly, the visibility of East Indians has been heightened by media coverage, both past and present. Indra (1979) argues that the media has

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5 This is not to suggest that East Indians and Pakistanis should be considered as indistinguishable groups. However, as Buchignani suggests, "most British Columbians do not recognize that any significant differences exist between people of the various ethnic groups [e.g., Indians, Pakistanis, Fijians] they would include under the rubric of East Indian" (1979:331).
Figure 3.1: The Population Distribution of Persons of Indo-Pakistani Origin in Canada - 1981
provided much negative coverage and has promoted South Asian stereotypes since the arrival of the first East Indian immigrants. As well, recent local, national, and international events have received extensive media coverage and this has served to highlight the visibility of East Indians in Vancouver. Included are the assassination of Indira Gandhi (1985) and resulting riots both in India and Canada, publicity over internal disputes concerning the Sikh homeland (1985), and the bombing of the Air India jet which was blamed upon Sikh extremists (1985). The media coverage of these incidents has served to enhance the visibility of East Indians in Canada, and much of the coverage has had negative overtones.

Finally, both historical and recent accounts indicate that East Indians as a group have been, and continue to be, the targets of prejudice and hostility. This provides evidence that ethnicity is operative as a status characteristic, and both beliefs about and evaluations of the group indicate that East Indians in Canada are generally perceived to be of low status. Stereotypes about them and descriptions of their treatment (both historical and recent) are outlined below.

The first East Indians arrived in Canada in the early 1900s. Most were men and most were poorly educated. The environment of the host society was a hostile one, and Anti-Asian sentiment flourished (directed primarily against the Chinese at this point). As Raj explains (1980:65):

The dominant society wanted to keep Canadian soil free from another "Asian defilement", East Indians in this case. To achieve this objective, the dominant society, at first, tried to exclude East Indians from Canada.

What became known as the Asiatic Exclusion League was active in British Columbia during the early part of the century. Activists lobbied to have persons of Asian descent excluded from the country, purportedly "for their own good". The argument was made that "their willingness to work for low wages [and long hours], and their filthy and immodest habits invited reprisals." (Bhatti, 1980:45). The Asiatic Exclusion League struggled to prevent further immigration, as well as to prevent East Indian men from bringing their wives to join them.
Stereotypes about East Indians developed in these early years, aided by the media. According to Johnston "the newspapers in Vancouver and Victoria described Indians as undesirable, degraded, sick, hungry and a menace to women and children" (1984:6). Indra makes a similar claim, arguing that (1979:168):

Without qualification, the press claimed that South Asians were fundamentally different from normal members of society. They were shown to be chaotic carriers of a dangerous and foreign culture who threatened the existence of Vancouver as it was then constituted.

Many of the stereotypes previously applied to the Chinese were also used to describe these newcomers. "Like all Asians, they often were seen as unclean, diseased and a threat to public health" (Ward,1978:83). And since many of these initial immigrants were poor, uneducated, unskilled, and few spoke English, these characteristics also became part of the stereotype. As Ward explains (1978:82):

The Indians seemed a lesser breed of men, given to weakness, servility and in some cases villany. . . . Furthermore, contact between the newcomers and whites soon began to flesh out the bare bones of these stereotypes. Many of the Indians were destitute when they landed. As they frequently seemed penniless and ill prepared against the weather, many whites concluded that these newcomers were quite unsuited for life in B.C.'s more rigorous climate.

Finally, most East Indian immigrants were viewed as Hindus (Hindoos), although the majority were, in fact, Sikhs from the Punjabi region. And "he [the 'Hindoo'] was perceived to be dirty and unsanitary, with an 'intrinsic' Oriental tendency towards overcrowding and consequent immorality" (Buchignani,1977:88).

With regard to the evaluation of this group, much can be assumed from the treatment they received and the references made to them. The fact that an attempt was made to exclude East Indians from the country and/or to prevent further immigration speaks of their low social prestige. More specifically, Ramcharan expressly states that "without exception the attitudes of the White majority towards East Indians in this early period were quite similar to the prejudicial attitudes held by many today, that East Indians were culturally and racially inferior to whites" (1982:23). While
the statement is a probable exaggeration, the negative evaluation of persons of East Indian origin is clear. Finally, if more rigorous evidence is required, Bogardus' original study involving the social distance scale (1925) provides some indication of the evaluation the group received in early part of the century, insofar as we can extrapolate from conditions in the United States. In this early study, 'Hindus' were located at the bottom of the scale, considered a group with whom very little social intimacy was desired.

From 1909 to 1947, East Indian immigration to Canada was essentially banned, along with the immigration of various other Asian groups. Restrictive legislation passed by the federal government severely limited the number of East Indian immigrants. Restrictions included "continuous passage" legislation which stipulated that potential immigrants must make uninterrupted passage from their homeland to Canada. Since virtually no ships sailed directly from India to Canada, almost all East Indian immigration was halted. An additional restriction requiring that all immigrants be in possession of 200 dollars upon arrival was an almost impossible achievement for these impoverished farmers from the Punjab. Thus, as Scanlon explains (1975:22):

During the years from 1914 to the end of World War II (1945), only a trickle of East Indians came into the country; in fact five times during those years there was not a single entrant. And those who did enter were labelled second-class citizens.

This second-class status of East Indian immigrants was reflected in their ineligibility to sit on juries, their inability to hold land in certain parts of Vancouver, and the barring of their entrance into occupations such as law and medicine (Scanlon, 1975:22). As well, until 1947, only those East Indians who had fought during the first World War were eligible to vote. It was not until 1947 that East Indians were granted the right to vote in federal and provincial elections, and not until one year later that they were awarded the franchise in municipal elections.

Restrictions on immigration were lifted following the second World War, and immigration resumed. The influx of East Indian immigrants increased dramatically during the late 1960s and
1970s when the federal government removed all racial, national, and ethnic restrictions from its immigration regulations. Not only has the change in regulation increased the number of East Indian immigrants such that they are now one of the fastest growing immigrant groups in Canada, but the replacement of ethnic restrictions with socio-economic criteria has changed the profile of the immigrants as well. Although the following quotation from Nimbark describes recent immigration of East Indians to the United States, the description applies equally well to the Canadian situation (1980:252):

Whereas the earlier immigrants . . . were largely poor, uneducated, and from rural backgrounds or urban ghettos, Indians by and large hail from upper or upper middle classes, higher castes and metropolitan areas. They do not come via cargo ships, but by jet planes; and they do not settle in semi-segregated ethnic slums, factory environments or farms, but tend to concentrate around universities and prestigious neighborhoods.

Thus, in contrast to those who arrived during the early part of the century, the recent immigrants from India are apt to be relatively wealthy, educated and highly skilled.

However, the changing profile of immigrants has not significantly altered the attitudes toward them. As Henry and Tator argue, "... paradoxically, although these new immigrants [are] far more skilled, secularized and urbanized than previous immigrants (who were almost all unskilled and from largely rural areas), they [are] still perceived to be inferior and unsuited to the Canadian way of life" (1985:323). In fact, the overall reaction to the relatively rapid acceleration of East Indian immigration over the past two decades has been negative rather than positive. According to Buchignani, Indra and Srivastiva, "it is clear that South Asians generally continue to be seen in more negative and stereotypical terms than any other widely distributed Canadian ethnic or racial group" (1985:221). Further support for this claim is found in a relatively recent study by Li who found substantial evidence of prejudice toward Asians in a Western Canadian city, with East Indians being perceived more negatively than Chinese (Li, 1979:75). Thus even when compared to other Asian and visible minority groups, East Indians tend to be viewed in a negative light.
This negative view can be seen in the recent stereotypes applied to East Indians in Canada. By and large, East Indians are seen as racially and culturally different, and have "... been stereotyped as clannish, self centered, arrogant, argumentative, and confrontational" (Buchigini, Indra and Srivastiva, 1985:221). This stereotype can be expanded to include the following attributes. According to Buchignani, the British Columbian stereotype contends that South Asians (1979:54):

1. Use deviant dress, food and language,
2. Live in overcrowded and unsanitary conditions,
3. Are violent, contentious, socially distant and think themselves above the law,
4. Are not committed to Canadian life and hence avoid their societal responsibilities, dodge hard work and drain social services,
5. immigrate illegally,
6. exploit each other.

Like the beliefs which prevailed in the early part of the century, stereotypes of East Indians today still contain a number of negative references.

The negative view of this ethnic group is also evident in the treatment they receive. Although immigration restrictions have been lifted and East Indians have been accorded the same legal rights as other Canadians, treatment of the group still indicates their negative evaluation. During the mid-70s, racial discrimination and violence were aimed at East Indians, particularly those residing in Toronto and Vancouver. According to Johnston, there was (1984:20):

... evidence of animosity directed against Sikhs and other Indians, ranging from racist signs and bumper stickers to acts of vandalism, assaults on individuals and, in a couple of instances, minor riots. In Vancouver, the problem of vandalism against Sikh property was most acute during the period 1972 to 1975 and sufficiently serious, in the assessment of the Vancouver police, to warrant the creation of special neighborhood patrols.

Although it appears that greater ethnic tolerance has developed over the past few years, prejudicial
treatment of East Indians continues to indicate their low social evaluation (see for example Robson and Breems, 1985).

Finally, additional evidence of the negative evaluation of the group is found in the studies of ethnic prestige and social distance cited in the previous chapter. In virtually all the studies where the evaluation of East Indians was included, the group was found near the bottom of the ethnic hierarchy, regardless of which methodology was used. Only in Goldstein's study of ethnic prestige (1978) was the evaluation somewhat more positive, although still below English and North and Western European groups. Recent data collected in the same city (Winnipeg), this time measuring social distance, indicates that the negative evaluation of East Indians is increasing rather than decreasing (Clifton and Perry, 1985).

This chapter has served to outline the stereotypes and evaluations applied to East Indians in Canada. While the previous chapter argued that ethnicity can legitimately be considered a diffuse status characteristic in the Canadian context, this chapter has focussed upon East Indians and provided evidence to suggest that "East Indian" is a low state of the status characteristic. As well, reasons for selection of the group were outlined. The following chapter will provide a description of the experimental methodology used to investigate the relations between Whites and East Indians at the University of British Columbia.
Chapter 4:

Methodology

The basic premises of status generalization theory, and the scope conditions under which it applies have been outlined in Chapter One. As well, the concept of performance standards has been introduced and discussed within this theoretical context. The second chapter discussed ethnic stereotypes and prestige, and provided suggestive evidence that:

1. Ethnicity is a status characteristic, and
2. In Canada, persons of East Indian origin are generally considered to be of lower status than White persons.

Specific beliefs about and attitudes toward East Indians in Canada were outlined in Chapter Three.

This chapter describes two related experiments designed to provide an empirical test of propositions derived from status generalization theory. In both experiments, ethnicity operates as the independent variable, and "East Indian" and "White" constitute the values of the variable. Both experiments are designed to investigate (a) the extent to which the chosen values of the ethnicity variable function as a diffuse status characteristic in Canada, and (b) to test the proposition that performance standards are an additional component of the power and prestige order of groups. A secondary concern in both experiments is whether or not gender differences are evident.

Experiment One is designed to test the effects of the diffuse status characteristic ethnicity (as operationalized) upon (i) influence accepted, and (ii) performance standards applied to self and other. The second study (Experiment Two) is exploratory in nature, and is conducted to obtain an indication of the strength of the ethnicity variable. Scores are introduced as an indicator of ability to determine the combined effect of ethnicity and performance on (i) and (ii) above. The two experiments are discussed separately below.
Experiment One (Ethnicity Only):

Participants worked on a task in same-sex dyads and were randomly assigned to conditions. There were four conditions in the experiment, two involving male dyads and two involving female dyads (see Table 4.1). All participants were White, and were led to believe that their partner was either White or East Indian. Subjects performed a set of twenty trials on a task, and received no information about their performance or their partner's performance. Instead, they were asked to estimate their score and that of their partner. As well, subjects were asked to set the standards that they felt would indicate possession of ability in self, and lack of ability in other. A second set of trials ensued, with subjects purportedly receiving feedback from their partner. The feedback was experimenter-controlled so that subjects were required to resolve a number of disagreements. The proportion of times a subject resolved a disagreement by staying with his/her own initial or self response [referred to as P(S)] provided a measure of influence and, indirectly, an indication of expectations of competence. As Foschi, Warriner and Hart explain (1985:108):

When faced with a disagreeing partner, subjects who hold higher expectations for self than for other tend to reject the partner's response. On the other hand, subjects who hold lower expectations for self than for other tend to accept the discrepant response of the other person.

Experiment One was designed to answer two major questions:

1. What effect do the chosen values of ethnicity have on performance standards? (i.e., are double standards employed?)

2. What effect do the chosen values of ethnicity have on influence accepted?

Of secondary concern was the issue of gender differences (i.e., are any gender differences evident?).

The experiment was designed to meet the specifications of status generalization theory. When the scope conditions were met (task orientation and collective orientation), and the status characteristic was activated, it was hypothesized that ethnicity would affect performance standards and influence. It was predicted that the difference between the standards applied to self as an
indication of ability, and those applied to other as an indication of lack of ability, would be greater when one's partner was White than when he/she was East Indian. This reflects a more lenient standard for ability applied to self, and a more stringent standard for lack of ability applied to other in the latter case. For example, a standard of 60% as an indication of ability is more lenient than a standard of 70%, since the criteria for demonstrating ability is more rigorous in the latter case. As well, a standard of 40% as indicating lack of ability is more stringent than a standard of 30%, since the latter standard allows for greater error before absence of ability is assumed. If a more lenient standard is applied to self as an indication of ability (e.g., 60%), and a more stringent standard is applied to the other as indicative of no ability (e.g., 40%), the difference between the two will be smaller than when a more stringent standard is applied to self (e.g., 70%) and a more lenient standard is applied to other (e.g., 30%). The latter is predicted in cases where the partner is White, and the former is anticipated when the partner is East Indian. As well, it is expected that less influence will be accepted from an East Indian partner. Both these predicted outcomes demonstrate perceptions of lesser competence based on the ethnicity of the partner, in this case East Indian. No gender differences were anticipated. Although gender is recognized as a status characteristic, it is assumed that it will not define the situation when participants are equated in terms of the characteristic (i.e., both are male or both are female). Since gender is assumed not to be relevant in such instances, differences between male and female dyads are not expected (for further discussion see Berger et al., 1980:482–496 and Berger, Wagner and Zelditch, 1985). Supporting evidence is found in Tuzlak and Moore’s study of race and demeanor (1984) where no difference in influence accepted was found between male and female dyads.
Table 4.1 provides a summary of expected results:

Table 4.1: Overview of Experiment One

<table>
<thead>
<tr>
<th>Condition</th>
<th>Sex of Dyad</th>
<th>Ethnicity of Other</th>
<th>Score</th>
<th>Standard minus Standard P(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M</td>
<td>White</td>
<td>none</td>
<td>a</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>Indian</td>
<td>none</td>
<td>b</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>White</td>
<td>none</td>
<td>c</td>
</tr>
<tr>
<td>4</td>
<td>F</td>
<td>Indian</td>
<td>none</td>
<td>d</td>
</tr>
</tbody>
</table>

Predictions:
\[ a = c > b = d \]
\[ e = g < f = h \]

The experimental methodology is outlined in greater detail below.

Subjects:

Subjects were recruited from first and second year Arts and Science classes at the University of British Columbia. All were volunteers; however incentive was provided by means of a lottery. Odds were approximately one in thirty to win fifty dollars.

Subjects were White males and females, and suitability to the "White" criteria was determined a priori on the basis of surname. Information regarding surname was obtained from the recruitment form (see Appendix A). Those with obviously Asian names (e.g., Singh, Wong) were excluded from the sample. Priority was given to subjects with Anglo Saxon surnames (e.g., Buchanan, MacDonald), although those with less obviously Anglo names were also included.

Confirmation was later obtained through the use of visual cues and the country of birth reported on the demographic form.
Subjects worked in same-sex dyads and were randomly assigned to conditions outlined above.

**Experimenters:**

The experiment was conducted by two White female experimenters. Care was taken to maintain consistency in appearance and presentation, and the clothing worn was standardized in order to ensure a uniform and professional appearance. As well, a standardized set of instructions was presented.

**Procedures:**

The experimental procedures were adapted from the model proposed by Berger and associates (see Berger et al., 1977) to test propositions derived from status generalization theory. This standardized experimental situation was designed to ensure comparability of results across studies.

To avoid the formation of expectations on the basis of cues other than ethnicity, subjects were neither allowed to meet nor to verbally communicate with their partner. The partner was in fact an employed confederate. Upon arrival at the laboratory, subjects were seated at a station where partner visibility was blocked by a partition. They were requested to complete a consent form (Appendix B) and a demographic form (Appendix C). The demographic information requested included name, age, marital status, languages, country of birth, and level of education. Subjects were then informed of the characteristics of their partner via this demographic form. Forms were exchanged with the explanation that it was necessary to ensure that participants were not acquainted, while at the same time desirable for them to possess some information about their
partner without actually meeting him or her (see Appendix D).

On the demographic form, the variables of age, level of education, gender, and marital status were held constant insofar as these characteristics were reported to be similar (the first two) or the same (the last two) for both subject and partner. Sufficient information was obtained on the recruitment form to make this possible (see Appendix A): Cues to ethnicity were provided by:

(A) Name:  
Doug Edwards (Condition 1)  
Diane Edwards (Condition 3)  
Mandip Sidhu (Condition 2)  
Satinder Sidhu (Condition 4)

(B) Country of Birth:  
Canada (Conditions 1,3)  
India (Conditions 2,4)

(C) Languages:  
English (Conditions 1,3)  
English and Punjabi (Conditions 2,4).

The experiment was conducted in the guise of a job performance study, and instructions were given to encourage effort and involvement (see Appendix D). Participants were required to perform a task involving a fictitious ability called "contrast sensitivity". A series of slides was shown, each slide containing two black and white rectangles (see Appendix E). Participants were asked to judge which rectangle contained the greatest amount of white area, and their answers were indicated on a response terminal. Instructions were given explaining the difficulty of the task and stressing its importance (Appendix D). The task was in fact ambiguous in the sense that the probability of making a correct choice was no greater than chance.

There were two stages in the experiment, the first consisting of twenty trials and the second consisting of twenty-five. During the first series, subjects worked alone and received no feedback from their partner. Upon completion of the series, subjects received no information about their performance or that of their partner. They were asked instead to *estimate* the scores for both self
A questionnaire was administered which not only checked that the experimenter instructions had been followed, but also asked subjects to set performance standards for themselves and their partner (see Appendix F). Subjects were requested to identify the score out of 100 which would indicate:

1. possession of ability in self, and
2. lack of ability in other.

During the second set of trials, participants were instructed to work as a team to choose the correct answer. The importance of teamwork was emphasized in order to ensure collective orientation (see Appendix D). As well, for each group of twenty-five teams, a prize of twenty dollars was offered to the team with the highest score. This was designed both to motivate the subjects and to enhance collective orientation. At the end of the study, participants were randomly selected for this prize, with a one in twenty-five chance to win the twenty dollars. This was in addition to the fifty dollar lottery for participation.

All subjects were shown a second series of slides, and asked to make judgements as in the first part of the study. At each trial they received what they believed to be their partner's choice and, given this information, were asked to make a final decision. The response panels were connected to an Interaction Control Machine (ICOM) which allowed the experimenter to control the feedback (as described by Webster and Sobieszek, 1974: Appendix 1). All participants received five agreements and twenty disagreements in a prearranged order (see Appendix G). The agreements were designed to dispel any suspicions, and the manner in which the disagreements were resolved (i.e., whether or not a subject stayed with his/her initial response) provided a measure of influence. Upon completion of this second series of trials, all participants completed a second questionnaire (Questionnaire B – see Appendix H). Once again, the principal purpose of the questionnaire was to ensure that the various conditions had been met, and that the ethnicity
variable had been activated.

At the end of the study, subjects were individually interviewed to provide a further check on scope conditions and ethnic activation, and to identify any suspicions (see Appendix I). Finally, they received a thorough debriefing where the purpose of the experiment and the reasons for the deception were explained (see Appendix J). To prevent contamination of the subject pool through knowledge of the experiment, participants were asked to sign a form indicating that they would not disclose the details of the study (see Appendix K).

Experiment Two (Ethnicity plus Performance):

Experiment Two also consisted of four conditions with two levels of ethnicity and two levels of gender (see Table 4.2). Subjects were randomly assigned to conditions. The procedures were similar to those employed in Experiment One in all respects but one. In this experiment, the specific characteristic of performance ability (as indicated by scores on the initial series of trials) was introduced. Following the first series of trials, participants were shown their purported "scores" which provided them with a measure of their (and their partner's) ability on the task. In all cases, the subject was placed in a marginally advantageous position insofar as he/she was given a slightly higher score (13 out of 20) than was his/her partner (who received a score of 11 out of 20). These scores were "average" in that they were neither particularly good nor bad, and one person did not perform considerably better or worse than the other. Exactly equal scores were avoided so as not to create suspicion, and the higher score was given to the subject in order to be consistent with the ethnic manipulation (i.e., persons of higher ethnic status also received the higher score).

The introduction of scores allowed for the determination of the strength of the ethnicity variable. However, because of the exploratory nature of the experiment, predictions were tentative.
The literature suggests that when more than one piece of status information is provided, subjects combine this information to arrive at expectations for self and other (see for example Zelditch, Lauderdale and Stublarec, 1980). In this instance, the combination was between a direct (and therefore strong) link between performance (scores) and expectations, and an indirect (and therefore weak) link between ethnicity and expectations, since ethnicity was not made explicitly relevant to the task. Figure 4.1 illustrates this concept, where according to standard expectation states notation, [00] indicates equal expectations for self and other, and [+-] signifies higher expectations for self than for other.

Since the stronger link suggests equal expectations for self and other, it is anticipated that resulting expectations will be equal in all conditions. However, if the effects of ethnicity are still present, differences between conditions (5) and (6), and between conditions (7) and (8) should result. The outcome depends upon, and thus provides a measure of, the strength of the ethnicity variable. As in Experiment One, no gender differences are predicted.

Figure 4.1: Linkage Between Ethnicity, Performance and Expectations
Table 4.2 provides a summary of expected results:

Table 4.2: Overview of Experiment Two

<table>
<thead>
<tr>
<th>Condition</th>
<th>Sex of Dyad</th>
<th>Ethnicity of Other</th>
<th>Score</th>
<th>Standard minus Standard</th>
<th>P(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>S</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>(5)</td>
<td>M</td>
<td>White</td>
<td>13</td>
<td>11</td>
<td>h</td>
</tr>
<tr>
<td>(6)</td>
<td>M</td>
<td>Indian</td>
<td>13</td>
<td>11</td>
<td>i</td>
</tr>
<tr>
<td>(7)</td>
<td>F</td>
<td>White</td>
<td>13</td>
<td>11</td>
<td>j</td>
</tr>
<tr>
<td>(8)</td>
<td>F</td>
<td>Indian</td>
<td>13</td>
<td>11</td>
<td>k</td>
</tr>
</tbody>
</table>

Predictions:

- \( h = j \)
- \( l = n \)
- \( i = k \)
- \( m = o \)

Procedures:

Subjects were drawn from the same subject pool as in Experiment One, and criteria for selection were the same. Procedures and manipulations were similar except for the introduction of scores. Subjects received a computer printout showing the "scores" for both self and other on the first twenty trials (see Appendix L). Instructions were given to ensure that both scores were noticed. As in Experiment One, a questionnaire was administered to subjects following the first twenty trials (see Appendix M). The purpose was to determine the effectiveness of experimenter instructions, and to allow subjects to identify the performance standards they would apply to themselves and their partner. As well, subjects were asked to report their score and that of their partner to ensure that both had been noticed. The second series of trials and follow-up procedures (i.e., Questionnaire B, interview, and debriefing) were the same as in Experiment One.
This chapter has outlined two experiments which explore the effects of ethnicity on standards and influence. The first examines the effect of the diffuse status characteristic ethnicity on performance standards applied and amount of influence taken. The second introduces the specific characteristic of performance (i.e., scores) to determine the combined effect of ethnicity and equal performance on the dependent variables identified above. This allows for the determination of the strength of the ethnicity variable as operationalized. The results of these two experiments are presented in the following chapter.
Chapter 5:

Results and Analysis

This chapter presents and discusses the results of the two experiments outlined in Chapter Four. Results from the dependent variables as well as from the various manipulations are analysed, and consideration is given to gender differences. The two experiments are discussed separately below. It should be noted that due to constraints of time and money, the number of subjects in each experiment is less than the twenty per cell usually included in expectation states research.

EXPERIMENT ONE: RESULTS

A total of 51 subjects were run, 26 males and 25 females. Following a thorough examination of the data, 3 subjects or 5.9% of the total were excluded. Rules for rejection were conservative and were formulated prior to analysis (see Appendix N). Reasons for exclusion included failure to meet the scope conditions of the experiment (e.g., low motivation, lack of collective orientation), suspicion, failure to meet the "White" criteria, as well as technical error. In the present experiment, one subject was rejected because of failure to meet the "White" criteria, the second was excluded for failing to take the task seriously, and the third was eliminated because of lack of collective orientation.

The following analysis includes only those 48 subjects who were retained. Twelve subjects are included in each of the four conditions. The majority of these participants (N=44) were born in Canada, with each of the remaining 4 born in the United States, England, Scotland and Sweden respectively. Subjects ranged in age from 16 to 22, with a mean age for males of 18.63, and a mean age for females of 18.46.
Manipulation checks:

An examination of a number of auxiliary variables relevant to the experimental manipulations will be conducted before proceeding to an analysis of the dependent variables. The primary purpose is to determine whether or not the independent variable of ethnicity has been activated, and to ascertain the extent to which the other manipulations (i.e., motivation, task orientation) have been successful. As well, interest lies in determining whether or not any consistent differences across gender of dyad and/or ethnicity of partner are present on any of these manipulations, since such differences would influence the dependent variables.

In each of the four conditions, subjects were asked to estimate the scores of self and other following the initial phase of the experiment (i.e., the first twenty trials). Subjects tended to assume that either they and their partner scored equally well, or that the partner scored somewhat better. Table 5.1 summarizes the scores estimated for self and other under each of the four experimental conditions:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Score For Self</th>
<th>Score For Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean  S.D.</td>
<td>Mean  S.D.</td>
</tr>
<tr>
<td>(1) Male-White</td>
<td>10.25 2.45</td>
<td>11.33 1.72</td>
</tr>
<tr>
<td>(2) Male-East Indian</td>
<td>10.58 2.11</td>
<td>12.08 1.93</td>
</tr>
<tr>
<td>(3) Female-White</td>
<td>10.33 2.39</td>
<td>11.58 2.35</td>
</tr>
<tr>
<td>(4) Female-East Indian</td>
<td>10.83 1.80</td>
<td>11.25 2.88</td>
</tr>
</tbody>
</table>

The positive difference observed reflects the general belief that the partner performed somewhat better. Although some variation in the difference between estimated scores for self and
other is evident, it is not shown to be statistically significant. Nonetheless, it is interesting to note that the smallest difference between the two values is found for females working with an East Indian partner. Contrary to what might be expected, this finding would suggest that subjects in this condition feel most equal to their partner.

When asked to rate the performance of self and other on a five-point scale ranging from (1) poor to (5) excellent, the majority of participants rated their performance as either "fair" or "good" (see Figures 5.1), and the performance of their partner as "good" (see Figure 5.2).

Figure 5.1 Performance Rating of Self – Questionnaire A

---\( (1) \) Male-White
---\( (2) \) Male-East Indian
---\( (3) \) Female-White
---\( (4) \) Female-East Indian

PERFORMANCE RATING OF SELF

7Statistical tests used were Mann-Whitney U tests and chi-square values. In several cases in the following discussion references are made to the results of such tests without actually presenting them for the sake of simplifying the discussion.
Females were slightly more positive than males in their rating of self, and both males and females gave a more positive rating to the performance of the partner than to their own performance. This finding parallels the higher mean score estimated for the other. Nonetheless, the majority of subjects (N=35) rated the partner's overall ability to be the same as their own after the first twenty trials. The remaining 13 considered their partner's performance to be better than their own. No statistically significant performance differences were found across conditions, as graphically represented in Figure 5.3. A question concerning the partner's overall ability was also included in Questionnaire B. While subjects in all conditions were equally likely to rate their partner's ability as better than their own, males were somewhat more inclined than females to rate the partner's ability as worse than their own (see Figure 5.4). The differences were not, however, statistically significant. It thus appears that while subjects in all conditions estimated that the partner scored slightly better than self on the initial twenty trials, an overall feeling of parity prevailed.
Figure 5.3  Overall Ability of Other – Questionnaire A

- - - (1) Male-White
- - - - (2) Male-East Indian
- - (3) Female-White
- - - - (4) Female-East Indian

Figure 5.4  Overall Ability of Other – Questionnaire B

- - - (1) Male-White
- - - - (2) Male-East Indian
- - (3) Female-White
- - - - (4) Female-East Indian
Estimated scores for both self and other were relatively low, and this likely reflects the perceived difficulty of the task. Following both phases of the experiment, subjects responded to questions concerning task difficulty. In both cases, the vast majority of subjects (N=41 in both instances) reported that they found the task to be "difficult" or "very difficult". Slightly more males than females reported the task to be difficult; however, this difference was not statistically significant. Nor were there any significant differences found across conditions.

The somewhat higher mean score estimated for the partner may reflect a lack of confidence in self arising from the perceived difficulty of the task. On both Questionnaire A and Questionnaire B, subjects were asked to report their level of self-confidence on a five-point scale ranging from (1) very confident to (5) very insecure. Questionnaire A asked subjects how confident they were while working alone, while Questionnaire B assessed level of confidence while working with the partner. Table 5.2 presents the results for the "confident" and "very confident" categories.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Questionnaire A</th>
<th>Questionnaire B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Male–White</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>(2) Male–East Indian</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>(3) Female–White</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>(4) Female–East Indian</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Although statistically significant differences were not found across the four conditions on Questionnaire A, more females whose partner was White expressed self-confidence than did those whose partner was East Indian. This difference disappeared when working with a partner, and an approximately equal number of subjects in all conditions reported self-confidence on Questionnaire B.
A second measure of confidence was provided in Questionnaire B, this time relating to confidence in the partner's choices being correct. A four point scale was provided ranging from (1) very confident to (4) very uncertain. The differences observed were not statistically significant, although females expressed more confidence in their partner than did males, particularly when the partner was East Indian. This is represented in Figure 5.5.

Figure 5.5  Confidence in Partner - Questionnaire B

A measure of task importance was provided, and findings show that as subjects moved from the first phase of the experiment to the second, perception of task importance tended to increase. Table 5.3 summarizes the difference in task importance reported on Questionnaires A and B. The numbers reflect those subjects who reported the task to be "important" or "very important".
Table 5.3  Number of Subjects Reporting the Task to Be "Important" or "Very Important"  
- Questionnaire A and Questionnaire B

<table>
<thead>
<tr>
<th>Condition</th>
<th>Questionnaire A</th>
<th>Questionnaire B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Male-White</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(2) Male-East Indian</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>(3) Female-White</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(4) Female-East Indian</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

No statistically significant differences were found across gender or ethnicity although more males whose partner was East Indian reported the task to be "important" or "very important" on Questionnaire A. Overall, more subjects tended to rate the task as important on the first questionnaire than on the second.

In general, involvement, interest, and motivation also increased as subjects moved from the first phase of the experiment to the second. Table 5.4 summarizes the findings for these three variables as reported on Questionnaire A and Questionnaire B. Five point scales were provided, and Questionnaire A asked subjects to rate their level of interest, involvement, and motivation while working alone. Questionnaire B required subjects to rate themselves on these three variables while working with their partner. The numbers of subjects reporting themselves to be at the two highest levels (i.e., "motivated" and "very motivated") of each variable are shown in the table.
Table 5.4  Number of Subjects Reporting High Levels of Motivation, Interest and Involvement – Questionnaire A and Questionnaire B

<table>
<thead>
<tr>
<th>Condition</th>
<th>Motivated Questionnaire</th>
<th>Interested Questionnaire</th>
<th>Involved Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>(1) Male–White</td>
<td>7</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>(2) Male–East Indian</td>
<td>8</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>(3) Female–White</td>
<td>5</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>(4) Female–East Indian</td>
<td>3</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

Although the differences are not statistically significant, it is interesting to note that, on average, males are slightly more interested, involved, and motivated than are females. Also of note is the finding that subjects in all conditions with the exception of males working with an East Indian partner (condition 2) show an increase on all three variables when working with their partner. More subjects in condition (2) report themselves to be involved and interested when working alone.

The overall increase in interest, involvement, and motivation can likely be attributed to the fact that subjects worked alone during the first series of trials, but had some interaction (albeit limited) with their partner during the second series. This is likely to have sparked greater interest and increased motivation. Some confirmation for this interpretation is found in participants' expressed preference for interaction with a partner. When asked what sort of interaction they would prefer if they could perform the task again, the majority (N=41) indicated that they would prefer to interact with a partner either through terminals (N=4) or face-to-face (N=37). Only 7 subjects reported that they would rather work alone.

In checking the activation of the ethnicity variable, two factors were analyzed. These were the language(s) spoken by the partner and his/her ethnicity. Subjects were asked whether they felt their partner was "similar" or "different" on these two variables, and an "uncertain" category was provided as well. All subjects (N=24) whose partner was East Indian rated the ethnic background
as "different". Just over one half (N = 13) of the subjects whose partner was White reported that their partner's ethnic background was similar to their own. Ten participants reported that they were "uncertain". During the post-experimental interview it was discovered that all subjects noticed that their partner was born in Canada, but did not automatically equate similar nationality with similar ethnicity. This would indicate that the White manipulation may have been somewhat weaker than the East Indian manipulation. Only one subject who was retained felt that his partner's ethnic background was "different". This subject was born in Scotland and reported in the post-experimental interview that he nevertheless felt quite similar to his partner. He was therefore retained in the study.

With regard to languages, the majority of subjects (N = 17) whose partner was East Indian reported languages to be "different". Those who reported that languages were "similar" or that they were "uncertain" tended to equate self and other regarding languages on the basis that both spoke English. Slightly more females (N = 5) than males (N = 2) equated themselves and their partner on the basis of languages, but these differences were not statistically significant. All males (N = 12) and the majority of females (N = 9) whose partner was White reported that the languages of self and other were "similar". Those who felt that the language of self and partner was "different" spoke one or more languages in addition to English (generally French). The gender difference observed was not statistically significant.

This section has demonstrated that subjects were aware of the key variable differentiating them (i.e., ethnicity). As well, no consistent differences across gender or ethnicity were found in terms of general measures of motivation and confidence. It appears, however, that subjects in all conditions felt themselves to be quite similar to their partner.
Dependent Variables:

In the following section, two dependent variables are examined. The first is the amount of influence a subject accepts/rejects from his/her partner when the two disagree. The second is the performance standards a subject applies to him/herself and the partner.

Influence:

"Influence" refers to the subject's rejection of his/her partner's proposed solutions when the two disagree. It is measured by recording the number of times the subject stays with his/her initial response rather than accepting the discrepant response of the partner. This is known as the "proportion of s-responses" or P(S), and is computed by dividing the number of s-responses per subject by the total number of trials. The higher the P(S) score, the less a person is influenced by the other. In addition, it is assumed that the less influenced a person is by his/her partner, the less competent the partner is perceived to be.

Tables 5.5 and 5.6 present the results on rejection of influence as measured by proportion of s-responses. Table 5.5 shows both the mean number and proportion of s-responses over subjects, and Table 5.6 provides a comparison across conditions.

Table 5.5  Rejection of Influence By Condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of S-Responses</th>
<th>Proportion of S-Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>(1) Male-White</td>
<td>11.3</td>
<td>2.71</td>
</tr>
<tr>
<td>(2) Male-East Indian</td>
<td>12.3</td>
<td>2.50</td>
</tr>
<tr>
<td>(3) Female-White</td>
<td>11.3</td>
<td>2.42</td>
</tr>
<tr>
<td>(4) Female-East Indian</td>
<td>10.1</td>
<td>2.84</td>
</tr>
</tbody>
</table>
Table 5.6  Mann–Whitney U–Tests on P(S) [adjusted for ties]

<table>
<thead>
<tr>
<th>Conditions Compared</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) and (2)$^i$</td>
<td>50.0</td>
<td>−1.29</td>
<td>.099</td>
</tr>
<tr>
<td>(3) and (4)$^i$</td>
<td>54.0</td>
<td>−1.05</td>
<td>.147</td>
</tr>
<tr>
<td>(1) and (3)$^i$</td>
<td>68.5</td>
<td>−0.21</td>
<td>.837</td>
</tr>
<tr>
<td>(2) and (4)$^i$</td>
<td>33.5</td>
<td>−2.25</td>
<td>.024</td>
</tr>
</tbody>
</table>

1. One–tailed.
2. Two–tailed.

The results show support for some predictions but not others. It was anticipated that subjects would accept less influence from an East Indian partner and that gender differences would not be evident. In examining the P(S) scores in Table 5.5, we see that the prediction of acceptance of less influence from an East Indian partner has some support for males but not for females. However, the effect of ethnicity upon influence is not as strong as expected. In addition, while the prediction of no gender differences holds for those working with a White partner, significant differences are found between males and females whose partner is East Indian. Further interpretation of these findings is provided in the following section.

Tables 5.7 and 5.8 present the results on the second dependent variable investigated, the standards applied to self and other. Table 5.7 summarizes the standards applied to self indicating possession of ability, those applied to other indicating lack of ability, and the difference between the two. Table 5.8 examines each of these variables separately, and provides a comparison across conditions.
Table 5.7  Standards Applied to Self and Other By Condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Mean</th>
<th>S.D.</th>
<th>Mean</th>
<th>S.D.</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Male-White</td>
<td>73.75</td>
<td>8.6</td>
<td>36.25</td>
<td>9.1</td>
<td>37.50</td>
<td>13.9</td>
</tr>
<tr>
<td>(2) Male-East Indian</td>
<td>75.00</td>
<td>8.5</td>
<td>45.42</td>
<td>11.6</td>
<td>29.58</td>
<td>13.2</td>
</tr>
<tr>
<td>(3) Female-White</td>
<td>72.08</td>
<td>5.8</td>
<td>42.92</td>
<td>12.1</td>
<td>29.17</td>
<td>14.6</td>
</tr>
<tr>
<td>(4) Female-East Indian</td>
<td>75.00</td>
<td>8.0</td>
<td>42.50</td>
<td>12.5</td>
<td>32.50</td>
<td>17.0</td>
</tr>
</tbody>
</table>

Table 5.8  Mann–Whitney U–Tests on Standards Applied To Self and Other [adjusted for ties]

**Standard for Ability in Self:**
- Conditions Compared
  - (1) and (2)
  - (3) and (4)
  - (1) and (3)
  - (2) and (4)
  
<table>
<thead>
<tr>
<th>Conditions Compared</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) and (2)</td>
<td>68.0</td>
<td>-0.24</td>
<td>.41</td>
</tr>
<tr>
<td>(3) and (4)</td>
<td>54.0</td>
<td>-1.07</td>
<td>.14</td>
</tr>
<tr>
<td>(1) and (3)</td>
<td>64.0</td>
<td>-0.48</td>
<td>.63</td>
</tr>
<tr>
<td>(2) and (4)</td>
<td>59.5</td>
<td>-0.74</td>
<td>.46</td>
</tr>
</tbody>
</table>

**Standard For Lack of Ability in Other**
- Conditions Compared
  - (1) and (2)
  - (3) and (4)
  - (1) and (3)
  - (2) and (4)
  
<table>
<thead>
<tr>
<th>Conditions Compared</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) and (2)</td>
<td>33.5</td>
<td>-2.29</td>
<td>.01</td>
</tr>
<tr>
<td>(3) and (4)</td>
<td>69.0</td>
<td>-0.18</td>
<td>.43</td>
</tr>
<tr>
<td>(1) and (3)</td>
<td>45.5</td>
<td>-1.55</td>
<td>.12</td>
</tr>
<tr>
<td>(2) and (4)</td>
<td>60.0</td>
<td>-0.73</td>
<td>.47</td>
</tr>
</tbody>
</table>

**Difference – Standard(S) Minus Standard(O)**
- Conditions Compared
  - (1) and (2)
  - (3) and (4)
  - (1) and (3)
  - (2) and (4)
  
<table>
<thead>
<tr>
<th>Conditions Compared</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) and (2)</td>
<td>48.0</td>
<td>-1.40</td>
<td>.08</td>
</tr>
<tr>
<td>(3) and (4)</td>
<td>66.5</td>
<td>-0.32</td>
<td>.37</td>
</tr>
<tr>
<td>(1) and (3)</td>
<td>54.5</td>
<td>-1.02</td>
<td>.31</td>
</tr>
<tr>
<td>(2) and (4)</td>
<td>68.0</td>
<td>-0.23</td>
<td>.81</td>
</tr>
</tbody>
</table>

1. One-tailed.
2. Two-tailed.
In examining Table 5.7 we note that predictions once again hold for males but not for females. As expected, a greater difference between the standard for ability applied to self and the standard for lack of ability applied to other is observed for condition (1) than for condition (2). The difference for females is smaller and in the opposite direction. It is interesting to note that the difference observed for males results almost entirely from a more lenient standard for lack of ability applied to the other when he is White. Further discussion of the data is provided below.

DISCUSSION:

The first variable to be discussed is the amount of influence rejected, as indicated by the proportion of s-responses. In examining Tables 5.5 and 5.6 we note that, as predicted, males are less influenced by a partner who is East Indian than by one who is White. Thus tentative support is gained for the prediction that persons of East Indian origin are perceived to be less competent than Whites. However, caution must be exercised in interpreting the results. The difference approaches but does not reach significance, and the prediction is not supported for females. Although a difference in the proportion of s-responses is evident in the latter case, it is in the opposite direction to what was anticipated with females accepting more influence from an East Indian partner. However, this difference is not statistically significant.

With regard to standards, we examine the difference between the standard for ability in self and the standard for lack of ability in other. Predictions once again have some support for males but not for females. For males, the difference between the two standards is smaller when the partner is East Indian, and this difference approaches significance. The difference primarily reflects a more stringent standard for lack of ability applied to the other. That is, males impose a stricter standard upon a partner who is East Indian than upon one who is White. The results show that, on
average, a White partner is assumed not to have contrast sensitivity ability if he scores 36% or less. On the other hand, an East Indian partner who scores 45% or below is assumed not to possess the ability. Little variation is found with regard to the standard for ability applied to self. Some difference is found in the female dyads although it is in the opposite direction to that predicted. There is a greater difference between the two standards when the partner is East Indian. This difference is not, however, statistically significant.

One notable finding of the experiment is that sex differences are evident, particularly with respect to an East Indian partner. This runs contrary to expectations. Males and females appear to react in an opposite manner, with males taking less influence from an East Indian partner, and females taking somewhat more. In addition, males impose significantly stricter standards for lack of ability upon an East Indian partner, while females differentiate very little.

These findings cannot be explained by the manipulations previously discussed since none of the differences observed were shown to be statistically significant. However, there are some indications that females felt more equal to an East Indian partner than did males. For example, females reported a smaller difference between estimated scores for self and other, and were somewhat more confident than males that their partner's response was correct. Because of the small number of subjects in each condition, definitive statements cannot be made. More work is needed to determine whether these sex differences are a result of certain features of the experiment, or if they reflect a disparity in male/female perceptions of ethnic differences.

In sum, predicted trends are evident for males but not for females. While males appear to perceive an East Indian partner as less competent, females tend to treat such a partner as an equal. Of note is the finding that differences across condition are not nearly so large as expected, or as the literature would suggest.
 Seventy-six subjects were run in this experiment, 38 males and 38 females. After a careful examination of the data, 16 subjects were excluded from the analysis. This constituted 21.1% of the total number. Rules for rejection were identical to those applied in Experiment One (see Appendix N) and excluded subjects can be categorized as follows: lack of collective orientation (6), suspicion (5), failure to meet "White" criteria (2), low motivation (2), and ICOM error (1).

It is notable that a considerably larger proportion of subjects was rejected from Experiment Two than from Experiment One. This is not particularly surprising, however, given that an additional experimental manipulation (i.e., computer printout of scores) was introduced. With each additional manipulation, the experiment becomes more complex and thus more difficult to execute successfully. As well, it is likely that greater suspicion and lack of collective orientation developed directly from the introduction of scores. First, subjects may have become suspicious of the large number of disagreements experienced during the second series of trials, particularly when they and their partner were shown to have performed equally well on the first set. Second, subjects may have been less inclined to give serious consideration to their partner's response since neither person performed particularly well and the partner's ability was shown to be no better than that of self. In fact, the partner was shown to be marginally worse, and this may have further discouraged collective orientation. Nevertheless, the number of subjects excluded is well within the figures reported in comparable experiments (see for example see Cook, 1975 and Parcel and Cook, 1977).

The following analysis includes only those 60 subjects who were retained. Fifteen subjects are included in each of the four conditions. As in Experiment One, the majority (N=51) of participants were Canadian-born, with the remaining 9 born either in the United States (N=3), England (N=5) or the Netherlands (N=1). Subjects ranged in age from 16 to 22. The mean age for
males was 18.40 and the mean age for females was 18.47.

Manipulation Checks:

As in Experiment One, a series of checks is first conducted to determine the activation of the independent variable and to ensure that the various other manipulations have been successful. The results are presented below.

Subjects were asked to report the number of correct responses made by self and other during the first set of twenty trials. All but one recalled the scores exactly. This subject showed only a slight deviation, reporting that the other had scored one point higher (i.e., 12/20) than the computer printout had revealed. All participants were then asked to rate their performance and that of their partner on a five-point scale ranging from (1) poor to (5) excellent. As Figures 5.6 and 5.7 reveal, the majority of subjects rated their performance and that of their partner to be "good". In neither case were statistically significant differences found across gender or ethnicity.

Subjects were also asked to compare their partner's overall ability with their own. Similar ratings were provided on both Questionnaires A and B (see Figures 5.8 and 5.9), with most subjects rating the partner's ability as either the same as or somewhat worse than their own. Females were slightly more inclined than males to equate the ability of self and other on Questionnaire B, although differences were not statistically significant.
Figure 5.6  Performance Rating of Self - Questionnaire A

Figure 5.7  Performance Rating of Other - Questionnaire A
Figure 5.8  Overall Ability of Other - Questionnaire A

Figure 5.9  Overall Ability of Other - Questionnaire B
Perceived difficulty of the task was assessed on Questionnaire A and Questionnaire B. In both instances, the majority of subjects found the task to be difficult. Table 5.9 summarizes the number of subjects who reported the task to be "difficult" or "very difficult" on each of the questionnaires.

Table 5.9 Number of Subjects Reporting the Task to be "Difficult" or "Very Difficult" - Questionnaire A and Questionnaire B

<table>
<thead>
<tr>
<th>Condition</th>
<th>Questionnaire A</th>
<th>Questionnaire B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) Male- White</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>(6) Male- East Indian</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>(7) Female- White</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>(8) Female- East Indian</td>
<td>14</td>
<td>14</td>
</tr>
</tbody>
</table>

No statistically significant differences were found across the four conditions, although more females whose partner was East Indian found the task to be difficult. Overall, perceptions of task difficulty increased as subjects moved from the first phase of the experiment to the second.

The difficulty of the task was reflected in subjects' expressed lack of self-confidence as shown in Table 5.10. The frequencies reflect persons who reported themselves to be "confident" or "very confident".

Table 5.10 Number of Subjects Reporting Themselves To Be "Confident" or "Very Confident" - Questionnaire A and Questionnaire B

<table>
<thead>
<tr>
<th>Condition</th>
<th>Questionnaire A</th>
<th>Questionnaire B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) Male- White</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>(6) Male- East Indian</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>(7) Female- White</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>(8) Female- East Indian</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>
In all conditions, the level of confidence was reduced following the second phase of the experiment. Such a noticeable reduction was not observed in Experiment One, suggesting that the observed difference may be related to the introduction of scores on which the subject did not appear to perform particularly well. On neither questionnaire were significant differences found across gender or ethnicity.

Confidence in the response of the partner being correct was also assessed on Questionnaire B. As Figure 5.10 reveals, most subjects were "somewhat uncertain" about the response of their partner, and this expressed lack of confidence is likely a result of the lower score given to the partner following the first twenty trials. No statistically significant differences were found in terms of ethnicity or gender.

**Figure 5.10**  Confidence in Partner – Questionnaire B

![Confidence in Partner - Questionnaire B](image)

- --- (5) Male-White
- --- (6) Male-East Indian
- --- (7) Female-White
- --- (8) Female-East Indian
With regard to task importance, no statistically significant differences were found across the four conditions on either questionnaire. However, more subjects whose partner was White rated the task as "important" following both phases of the experiment. Table 5.11 summarizes the findings for those who considered the task to be "important" or "very important".

Table 5.11 Number of Subjects Reporting the Task To Be "Important" or "Very Important" - Questionnaire A and Questionnaire B

<table>
<thead>
<tr>
<th>Condition</th>
<th>Questionnaire A</th>
<th>Questionnaire B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) Male-White</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>(6) Male-East Indian</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>(7) Female-White</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>(8) Female-East Indian</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Within each condition, little change in the perception of task importance was noted between questionnaires.

As was found in Experiment One, motivation, interest, and involvement increased as subjects moved from the first phase of the experiment to the second. No significant differences were found across conditions, although a slightly larger number of subjects whose partner was White reported themselves to be motivated, interested, and involved on Questionnaire B. Table 5.12 summarizes the findings for the manipulations motivation, interest, and involvement for both questionnaires. Included are the numbers for subjects reporting themselves to be at the two highest levels (i.e., "motivated" and "very motivated") of each variable.
Table 5.12 Number of Subjects Reporting High Levels of Motivation, Interest and Involvement – Questionnaire A and Questionnaire B

<table>
<thead>
<tr>
<th>Condition</th>
<th>Motivated Questionnaire</th>
<th>Interested Questionnaire</th>
<th>Involved Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>(5) Male−White</td>
<td>8</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>(6) Male−East Indian</td>
<td>8</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>(7) Female−White</td>
<td>6</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>(8) Female−East Indian</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

The overall increase in motivation, interest, and involvement was likely related to working with the partner in the second part of the experiment. When asked what type of interaction they would prefer if they were to perform the task again, just over two thirds of subjects (N=42) reported that they would prefer to interact with a partner (either face-to-face (N=36) or through the interactive terminals (N=6)). The remaining 18 preferred to work alone.¹

The activation of the ethnicity variable was examined by assessing the perceived similarity/difference between subject and partner in terms of ethnic background and language(s). All subjects (N=30) whose partner was East Indian rated ethnicity as "different". Of those whose partner was White, 11 rated ethnic background as similar to their own. The remaining 19 reported that they were "uncertain". As in Experiment One, it was discovered in the post-experimental interview that all subjects knew that their partner was born in Canada, but did not automatically equate similar nationality with similar ethnicity. With regard to languages, the majority (N=22) of those whose partner was East Indian reported languages to be "different". The fact that both self

¹It should be noted that the proportion of persons preferring to work alone is significantly larger than that found in Experiment One. This appears to support the suggestion that the introduction of scores operated to reduce collective orientation in subjects.
and other spoke English led some subjects (N = 8) to equate themselves and their partner in terms of language. Most subjects (N = 25) working with a White partner rated languages as similar, although some (N = 5) who read/spoke languages in addition to English reported them to be different.

As in Experiment One, it is evident that subjects were aware of their partner's ethnicity and that the various additional manipulations were successful. As well, no consistent differences across gender or ethnicity were found on any of the auxiliary variables examined. The dependent variables of influence and performance standards are discussed next.

**Dependent Variables:**

Table 5.13 and 5.14 present the results on rejection of influence as measured by proportion of s-responses. Both the mean number and proportion of s-responses over subjects are shown in Table 5.13 and a comparison across conditions is found in Table 5.14.

**Table 5.13  Rejection of Influence By Condition**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of S-Responses</th>
<th>Proportion of S-Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>(5) Male - White</td>
<td>12.6</td>
<td>2.44</td>
</tr>
<tr>
<td>(6) Male - East Indian</td>
<td>11.7</td>
<td>1.53</td>
</tr>
<tr>
<td>(7) Female - White</td>
<td>12.3</td>
<td>1.98</td>
</tr>
<tr>
<td>(8) Female - East Indian</td>
<td>11.7</td>
<td>2.05</td>
</tr>
</tbody>
</table>
Table 5.14  Mann-Whitney U-Tests on P(S) [adjusted for ties]

<table>
<thead>
<tr>
<th>Conditions Compared</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) and (6)</td>
<td>93.5</td>
<td>-0.80</td>
<td>.211</td>
</tr>
<tr>
<td>(7) and (8)</td>
<td>96.0</td>
<td>-0.69</td>
<td>.244</td>
</tr>
<tr>
<td>(5) and (7)</td>
<td>102.5</td>
<td>-0.42</td>
<td>.675</td>
</tr>
<tr>
<td>(6) and (8)</td>
<td>110.0</td>
<td>-0.11</td>
<td>.916</td>
</tr>
</tbody>
</table>

1. One-tailed.
2. Two-tailed.

The results show that the combined effect of ethnicity and performance served to equalize the interaction. This suggests that the effects of the ethnicity variable are not particularly strong. As well, no significant gender differences are found. The combined effect of ethnicity and scores on the performance standards is examined next. Tables 5.15 and 5.16 present the results on standards applied to self and other. The standards applied to self indicating possession of ability, those applied to other indicating lack of ability, and the difference between the two standards are summarized in Table 5.15. Table 5.16 provides tests of statistical significance on each of these variables independently.

Table 5.15  Standards Applied to Self and Other By Condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Standard for Ability in Self</th>
<th>Standard for Lack of Ability in Other</th>
<th>Difference Between the Two Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>(5)Male–White</td>
<td>73.33</td>
<td>6.5</td>
<td>43.67</td>
</tr>
<tr>
<td>(6)Male–East Indian</td>
<td>70.13</td>
<td>8.0</td>
<td>42.00</td>
</tr>
<tr>
<td>(7)Female–White</td>
<td>76.33</td>
<td>7.2</td>
<td>48.53</td>
</tr>
<tr>
<td>(8)Female–East Indian</td>
<td>77.00</td>
<td>6.8</td>
<td>45.67</td>
</tr>
</tbody>
</table>
Table 5.16  Mann-Whitney U-Tests on Standards Applied To Self and Other [adjusted for ties]

<table>
<thead>
<tr>
<th>Standard for Ability in Self:</th>
<th>Conditions Compared</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) and (6)¹</td>
<td>84.0</td>
<td>1.21</td>
<td>.114</td>
<td></td>
</tr>
<tr>
<td>(7) and (8)¹</td>
<td>105.5</td>
<td>-0.30</td>
<td>.383</td>
<td></td>
</tr>
<tr>
<td>(5) and (7)²</td>
<td>89.5</td>
<td>-0.98</td>
<td>.327</td>
<td></td>
</tr>
<tr>
<td>(6) and (8)²</td>
<td>58.5</td>
<td>-2.28</td>
<td>.023</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard For Lack of Ability in Other</th>
<th>Conditions Compared</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) and (6)¹</td>
<td>103.0</td>
<td>-0.40</td>
<td>.343</td>
<td></td>
</tr>
<tr>
<td>(7) and (8)¹</td>
<td>100.5</td>
<td>-0.52</td>
<td>.301</td>
<td></td>
</tr>
<tr>
<td>(5) and (7)²</td>
<td>88.0</td>
<td>-1.04</td>
<td>.297</td>
<td></td>
</tr>
<tr>
<td>(6) and (8)²</td>
<td>90.0</td>
<td>-0.97</td>
<td>.033</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difference - Standard(S) Minus Standard(O)</th>
<th>Conditions Compared</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) and (7)¹</td>
<td>108.0</td>
<td>-0.19</td>
<td>.425</td>
<td></td>
</tr>
<tr>
<td>(6) and (8)¹</td>
<td>92.5</td>
<td>-0.84</td>
<td>.201</td>
<td></td>
</tr>
<tr>
<td>(5) and (7)²</td>
<td>108.0</td>
<td>-0.19</td>
<td>.850</td>
<td></td>
</tr>
<tr>
<td>(6) and (8)²</td>
<td>92.5</td>
<td>-0.84</td>
<td>.403</td>
<td></td>
</tr>
</tbody>
</table>

1. One-tailed.
2. Two-tailed.

Table 5.15 shows that there is very little variation across conditions in the difference between the standard for ability applied to self and the standard for no ability applied to other. However, a significant difference is found for males and females whose partner is East Indian in terms of both the standard indicating ability in self and that indicating lack of ability in other. Further discussion of these results is provided in the following section.

**DISCUSSION:**

In examining the proportion of s-responses as an indication of influence, no statistically significant differences are found across condition or gender. Contrary to what might be expected, both males and females are somewhat less influenced by a White partner although this difference is
not significant. It thus appears that the introduction of equal and average scores serves to equalize
the interaction, and to eliminate any effects of ethnicity.

When the difference between the standard for ability in self and the standard for lack of
ability in other is examined, virtually no differences across ethnicity or gender are evident. Of note
is the finding that females impose a more stringent standard upon both themselves and their
partner than do males. In particular, statistically significant differences are found between males
and females whose partner is East Indian both for standards applied to self (ability) and those
applied to other (lack of ability).

The gender differences observed cannot be accounted for by any of the manipulations
previously discussed. No statistically significant differences are found between males and females
on any of the variables examined. It is interesting to note that the male/female variation in
performance standards applied was not evident in Experiment One, suggesting that males and
females have reacted differently to the introduction of scores. It appears that both men and women
have concluded that their partner is an equal (as demonstrated by the proportion of s-responses),
but this conclusion has been arrived at through the use of different standards. Females place
greater performance demands upon both themselves and their partner than do males.

To summarize, Experiment Two was exploratory in that it involved the introduction of
equal and average scores. This was sufficient to equalize the interaction, indicating that the
ethnicity variable was not particularly strong. While males and females accepted an equal amount
of influence from partners of both ethnicities, they arrived at this conclusion of parity through the
use of different standards. Females imposed more stringent performance standards on both
themselves and their partner, regardless of the partner's ethnic background.
This chapter has outlined and discussed the results of two experiments examining the effects of ethnicity on influence accepted and performance standards applied. The findings will be further discussed in the following chapter, and an attempt will be made to integrate them with the existing literature pertaining to status generalization and ethnicity in Canada.
Chapter 6:

Conclusion

This concluding chapter reviews the findings of the present research, and identifies the contribution made to the literature on status generalization and ethnicity in Canada. The significance of the research is highlighted and a number of suggestions for further study are made.

We begin with an overview of the findings, and note that the data described in the previous chapter yielded some intriguing results. In Experiment One, some support was shown for the prediction that the chosen values of the ethnicity variable operate as a status characteristic for males, but not for females. Male subjects accepted less influence from an East Indian partner (as shown by a greater proportion of s-responses) and also imposed more stringent standards indicating lack of ability on such a partner. Both of these outcomes reflect a perception of somewhat lesser competence in a person of East Indian origin. On the other hand, predictions regarding acceptance of influence were not supported for females. As well, the standard imposed upon the other as indicative of lack of ability varied little in relation to the partner's ethnicity.

In Experiment Two, the introduction of equal and average scores was enough to eliminate the effects of the ethnicity variable. In addition, it was noted that females impose stricter standards for ability on themselves, and stricter standards for lack of ability on their partner than do males. This occurs regardless of the partner's ethnic background.

Taking the two studies together, two findings are of particular significance. First, unanticipated gender differences are evident. This raises the question of whether these surprising results are a consequence of particular aspects of the experiment, or if they reflect an actual disparity in the manner in which males and females react to ethnic differences. Since no significant
gender differences were found in terms of orientation toward the task (i.e., motivation, involvement, confidence), these factors cannot explain the variation. However, there was some indication that females are more likely than males to equate themselves with an East Indian partner (see Table 5.1 and Figure 5.4).

Some possible explanations for this phenomenon emerge from the literature. For instance, a recent study by Lambert, Mermigis and Taylor (1986) explored the attitude of Greek Canadians toward a variety of Canadian ethnic groups. They found that females were more positive in their attributions to all ethnic groups in question. This would suggest that females may be less likely than males to adopt negative stereotypes, or at least are less extreme in their attribution of negative traits.

Works by Epstein (1973) and Ghosh (1981) provide another possible explanation. In an attempt to account for the success of Black professional women in the United States, Epstein suggests that the possession of multiple negative statuses (such as being non-White and female) may work to a person's advantage. For example, focusing upon one negatively valued characteristic may result in cancelling the negative effects of the other. As well, gender and race may combine to create a new status which is unique and therefore outside the normal opportunity structure. As outsiders, persons possessing such a unique status are perceived as powerless and non-threatening. It may also be the case that such persons are treated as individuals rather than as members of a category.

Ghosh (1981) applies Epstein's interpretation specifically to the multiple negative status of being female and East Indian in Canada. She argues that South Asian women "are very often characterized as persons with an unusual combination of features — non-White, female, passive, exotic, mysterious ..." (1981:420). This, in combination with their physical appearance and reserved manner, makes them seem "distant" and therefore unlikely to pose serious competition. It may be
that the East Indian female is perceived as non-threatening and non-competetive, and consequently receives more equal treatment. It may also be the case that she is perceived as an equal (e.g., if focus is upon the status of "female" rather than on the status of "East Indian).

Another possible explanation is that that females are generally less competitive than males and more willing to co-operate with a partner regardless of ethnic background. Or perhaps females are more sympathetic toward minority group members since they themselves possess minority status. Due to the small number of subjects in the present research, definitive statements cannot be made in this regard. Further research is needed in order to elucidate this issue.

The second finding of note is that the effect of the ethnicity variable is not nearly as strong as anticipated, or as the literature would indicate. The literature reviewed in Chapters Two and Three clearly suggests that ethnicity is an instance of a status characteristic in Canada and that, in particular, persons of East Indian origin possess a low state of the characteristic. However, the effect of the ethnicity variable was shown to be weak for males and non-existent for females in Experiment One. As a further indication that the variable lacks strength, the effects of ethnicity were eliminated with the introduction of equal and average scores in Experiment Two. Previous research involving interventions has shown the low status partner to be clearly superior in ability before equal interaction was achieved (see for example Cohen and Roper, 1972 [ethnicity]; Pugh and Wahrman ,1983 [gender]). In the present case, interaction disability was eliminated, even though the partner's performance was shown to be equal (in fact, marginally inferior) to that of the subject.

There are a number of possible explanations for the observed lack of strength of the ethnicity variable. First, the characteristics possessed by the subjects participating in the experiment may have reduced their propensity to react negatively to ethnic differences. In other words, ethnicity as operationalized may not have been a diffuse status characteristic for this particular
population. Subjects were, educated, were likely to have encountered members of various ethnic groups in the university setting, and were (presumably) from middle class backgrounds. It can plausibly be argued that each of these factors could operate to reduce ethnic animosity and stereotyping. Educated persons may have a greater knowledge and understanding of ethnic diversity and therefore be less likely to accept stereotypes without question (see Curtis and Lambert, 1976). Understanding and acceptance of ethnic difference might be further facilitated through exposure to various ethnic groups, providing such exposure is favorable (for further discussion see Amir, 1969). Finally, persons with middle class backgrounds will be financially secure, less threatened by other ethnic groups, and less likely to resort to scapegoating (see Berry, Kalin and Taylor, 1977). Thus the subject sample utilized may have reduced the potency of the ethnicity variable.

Another mitigating factor was the weakness of the ethnic manipulation itself. The manipulation lacked potency insofar as no visual cues were operative. As Rozenholtz and Cohen (1985) suggest, in some instances such cues are necessary for ethnic activation to occur. Nonetheless, the use of visual cues is not without problems as it has the potential to introduce a number of additional status cues (e.g., demeanor, attractiveness) which may confound the results. For this reason (and because of financial constraints) visual cues were not used in the present study.

The manipulation was further weakened since, in addition to information about ethnicity, participants were provided with demographic information upon which they and their partner were equated (e.g., age, level of education). It is possible that this equating information served to reduce the significance of ethnic differences with the result that the ethnicity variable did not operate maximally (see Seashore, 1965). Related to this, Goldstein (1985) argues that ethnicity is but one deference entitlement in Canadian society, and not the most significant one. In a recent study (cited in Goldstein, 1985:195–198), achieved characteristics such as level of education and occupation are shown to take precedence over ascribed characteristics such as ethnicity or nationality in
determining a person's social prestige. We might imagine that level of education would be of particular significance in the university setting, and the fact that subject and partner were equated on the basis of education may have been deemed more important than any differences in ethnicity.

Finally, although beliefs about and evaluations of East Indians were shown to be negative (see Chapter Three), it may be that beliefs about lesser competence are not part of the stereotype. Buchignani (1979:54) provides the most comprehensive stereotype of East Indians available in the literature, and describes members of the group to be deviant, contentious and uncommitted to the Canadian way of life. However, beliefs about competence are not specifically referred to. In addition, even if East Indians are generally perceived to be less competent, this stereotype may not have been applied to the fictitious partner since he/she was known to be a university student and therefore competent almost by definition. The partner may have been perceived to be a competent East Indian, perhaps an exception to the rule. If this were the case, the person may have been treated as an individual rather than a member of the category "East Indian". An additional possibility is that East Indians do not constitute a large enough group to pose a threat, and are therefore not treated as serious competitors.

Follow-up research is necessary in order to explore the effects of these various factors. Such a study would involve the use of either a live confederate or a videotape. Not only would this strengthen the manipulation through the introduction of visual cues, it would also eliminate the demographic form and therefore reduce the number of equating variables. In addition, it would be instructive to utilize a variety of subject populations (e.g., working people, school children ) to determine the impact of background variables such as age, education, and socio-economic status.

With numerous factors working against the activation of the ethnicity variable, perhaps it is less surprising that this variable had only weak effects, and more remarkable that some effects were observed at all. Nonetheless, the contribution of the work must not be overlooked. The study has
contributed to expectation states research by extending the work involving ethnicity as the independent variable. In particular, it has added a new dimension to the body of empirical work concerning status generalization and race/ethnicity in exploring the relations between Whites and East Indians in Canada. This is the first such study involving this particular ethnic group. The research has also raised a number of issues which must be explored within the context of expectation states theory. Foremost among these is the need for further investigation into the role of equating variables in expectation states experiments. In particular, the issue of gender should be addressed. That is, can gender really be considered an inconsequential variable for subjects working in same-sex dyads? This study and other recent works (see Ridgeway, 1982; Foschi, Warriner and Hart, 1985; Freeman, 1986) suggest that males and females working in same-sex dyads react quite differently to similar stimuli. More research involving a comparison between male and female dyads is needed.

As well, the issue of performance standards as a component of the power and prestige order of groups must be further investigated. The results of Experiment One suggest double standards are utilized in the evaluation of the other. Consistency may exist between performance standards applied and amount of influence accepted, and this requires further study. As well, Experiment Two suggested that males and females use different standards in evaluating the performance of self and other. Research is required in order to gain an understanding of performance standards and the conditions under which double standards are applied.

The present research has also contributed to the knowledge of ethnicity in Canada by drawing attention to the issue of ethnicity and perceived competence. In doing so, it has identified a deficiency in the existing literature. While much attention has been focussed upon ethnicity in Canada, the relationship between ethnicity and competence has generally been overlooked. Research is needed in order to redress this disparity, not only in the expectation states tradition but
also in stereotype research.

In an effort to gain greater insight into ethnic relations in Canada, surely an understanding of ethnicity and perceived competence is crucial. Acceptance of ethnic diversity is based in part upon the perception of members of various ethnic groups as competent members of society. This study has taken the initial steps in addressing the issue of ethnicity and competence, and has demonstrated the utility of status generalization theory in research of this nature. It has provided a model for expectation states research utilizing ethnicity as the independent variable, and has suggested some modifications to be introduced. As well, a number of avenues for further study have been identified. It is only once a clear understanding of the issue of ethnicity and competence is gained, that strides can be made to rectify the disparities which exist.
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DEPARTMENT OF ANTHROPOLOGY AND SOCIOLOGY
SMALL GROUPS LABORATORY
JOB PERFORMANCE STUDY

Signing this form does NOT obligate you to participate in our study, but simply provides a means of expressing your interest. Participation is strictly voluntary. You may change your mind at any time.

NAME (please print): ____________________________________________________________

TELEPHONE: __________________________________________________________________

BEST TIMES TO CONTACT: ______________________________________________________

BEST TIMES TO PARTICIPATE: _________________________________________________

SEX: ___________________ AGE: _______ YEAR IN SCHOOL (circle): 1 2 3 4 other

FEMALE: ________________________________________________________________

MAJOR/PLANNED MAJOR: _________________________________________________

LIST OF COURSES TAKEN, BY DEPARTMENT AND NUMBER (e.g., MATH 100, 101, 200, 201; FRENCH 110, 120, 220): __________________________________________________________

WHERE DID YOU TAKE THESE COURSES? __________________________________

HAVE YOU BEEN ASKED TO PARTICIPATE IN A SMALL GROUPS STUDY BEFORE? YES __ NO __

** THANK YOU FOR YOUR INTEREST **
Appendix B: Consent Form

Name: ____________________________________________.

The above named person agrees to participate in a study at the Small Groups Laboratory of the UBC Department of Anthropology and Sociology with the understanding:

1. that there are no physical or psychological risks involved,
2. that his/her participation will last for approximately one hour and 15 minutes,
3. that he/she may terminate and withdraw from the study at any time without having to account for the reasons for such action,
4. that confidentiality will be kept by the members of the research team regarding the names of the participants in the study, and
5. that all reports of the results will preserve the participants' anonymity.

Date: ____________ Signature: ____________________________.
Appendix C: Demographic Form

PARTICIPANT DEMOGRAPHIC FORM

Name: ____________________________________________________________

Sex:   male   female

Age:

18 - 24 ______
25 - 34 ______
35 - 44 ______
45 & up ______

Marital Status:

single ______
marrid ______
separated ______
divorced ______
widowed ______

Do you have any children?

yes ______
no ______

Place of Birth (Country): __________________________________________

Place of Residence (Province): ______________________________________
Languages:
Check the appropriate spaces below, and leave all other spaces blank.

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Education:
What level of schooling have you completed?

- high school
- undergraduate
- master's degree
- Ph.D.

Are you currently a student? yes no

If you are a student, what level of schooling are you working at now?

- high school
- undergraduate
- master's degree
- Ph.D.
Appendix D: Instructions to Participants

INSTRUCTIONS TO PARTICIPANTS

_Experimenter greets subject:_

Hello. Are you here for the small groups study? Please come with me.

**Condition 1 and 3:** Are you Doug/Diane or ______?

**Condition 2 and 4:** You are either Mandip/Satinder or ______. I assume you’re ______?

_The subject is taken to the lab to complete the consent form and the demographic form while the confederate is seated. Once the subject and confederate have completed the forms, the demographic forms are exchanged._

I will give you a few minutes to look these over. Please read them carefully. (Pause) We give you your partner's form for two reasons. First, we want to make sure that you don't know each other. We want people who are not acquainted to be partners in order to standardize the study. Second, we want to simulate the environment of the workplace as accurately as possible. Although you have been assigned to two task situations where you will not interact with your partner face-to-face, we realize that it is unrealistic to have people work together without knowing anything about one another. So take some time to read over the form to acquaint yourself with your partner. Tell me if you think you know him/her and if not, just hand the forms back to me when you are finished.

_Collect the forms._
Hello. My name is EXPERIMENTER and I am a research associate in the department of Sociology working with Dr. Foschi. First, I would like to thank you both for coming here today. I think you will find this an interesting and enjoyable experience. The study is simple and straightforward, and your participation will be kept confidential. I would like to remind you that the consent form you just signed allows you to leave at any time if you feel it is absolutely necessary.

In this study we are interested in the way in which various environments affect job performance, job satisfaction and job difficulty. This is an important issue these days, particularly with the widespread use of computers in the workplace which tends to limit interaction between workers. In our study we have participants work in four different work environments: no interaction, limited interaction, moderate interaction, and extensive interaction, and we are interested in determining the effects of each situation.

As you know, our study involves two participants. Today we have SUBJECT and CONFEDERATE. Both of you are 1st/2nd year arts/science students who have been assigned at random to work alone for the first part of the study in a no interaction context. For the second part, you have been assigned to a limited interaction context in which you will communicate through the terminals in front of you. At the end of each part you will fill out a questionnaire so that we can get your impressions of working in each situation.

Remember that in both contexts this is a study on job performance, so you should be trying your hardest. It is very important that you try your best at the task because we are trying to reproduce the environment of the workplace as accurately as possible.

The task you will be performing involves an ability called Contrast Sensitivity. Contrast Sensitivity has to do with detecting subtle differences between two patterns of black and white.
From what is known so far, Contrast Sensitivity is a very important ability. For instance, it is now included on most major North American aptitude tests. However, there is no significant relationship between it and such things as age, education, gender or any specialized skills such as mathematical or artistic ability. The absence of a relationship between Contrast Sensitivity and these other qualities and abilities is an important find and of great interest to social scientists. As well, the finding that life experiences and patterns of socialization may be correlated with Contrast Sensitivity is of particular interest to sociologists.

Contrast Sensitivity is, at the moment, being tested extensively at MIT, Princeton, Stanford University in California, and here at UBC. This particular project is a collaboration between UBC and Stanford. Contrast Sensitivity concerns the judgement of contrasts in shapes and colors. A series of black and white slides will be shown to you. The slides come from a very reliable test of Contrast Sensitivity consisting of 100 slides. However, studies have shown that ability can be accurately determined using only a portion of these. So you will be shown only some of these slides.

On each slide there are two different patterns, each composed of black and white. What you are asked to do is to judge whether the top rectangle or the bottom rectangle has more white area in it. Although this is a difficult task, studies have shown that those people who have the ability to make correct judgements do so without much difficulty, using their first impressions.

Once you have decided which rectangle has more white area in it, indicate your answer on the top of the panel by pressing either the yellow button labelled TOP or the yellow button labelled BOTTOM. (Point to these buttons on the response panels). In the second part of the study you will have a chance to use the other buttons, but for now you will just be using the top row. You will have about eight seconds to make your choice; after that a green slide will appear on the screen. If you have not made your choice by this point you must immediately do so. If you have not
responded by the end of the green slide the computer will record this as an error. After the green slide the computer will process your answers, the panels will be cleared, and we will go on to the next trial. There will be twenty trials in the first part.

At times this task will seem difficult because of the similarity between the two choices. The choices are difficult, but there is a correct answer. Don’t worry though, since other people who thought they were guessing in fact did quite well. Current research leads us to believe that these people were responding to subtle perceptual cues. So concentrate hard and follow any impulses you might have.

Are there any questions? OK — I will review quickly:

First, decide whether the top rectangle or the bottom rectangle has more white area in it.

Then, indicate your choice by pressing either the yellow button labelled TOP or the yellow button labelled BOTTOM.

You have eight seconds to answer for each slide.

I’ll see you after twenty trials. I would like to point out that in this first part you are working in a no interaction context, so please do not talk.

The experimenter leaves. Twenty slides are shown. The experimenter returns.
Experiment One:

We would now like to get your impressions of working in this no interaction situation. I have a questionnaire for each of you will I change the slide tray to prepare for the second part of the study.

Experiment Two:

We will have the computer results in a couple of minutes. Right now I have to change the slide tray to prepare for the second part of the study. Feel free to look at the magazines in the meantime.

*Take out the slide carousel and leave the room. Return and put the slide carousel back into the projector and forward to the first slide.*

*In Experiment Two, the printout is brought in by the controller. Take the printout, circle each person's score, and hand them to the participant and the confederate.*

SUBJECT, here are your results, and CONFEDERATE here are yours. Have a good look at all the results, both yours and your partner's. I will be back in a moment with the questionnaires for the first part of the study.

*The experimenter leaves to get the forms in order to give the subject time to look over his/her score. The experimenter returns, takes back the printouts and hands out the questionnaires. When the subject is finished, the questionnaires are collected.*
We are now ready to start part two. As I mentioned earlier, the second work environment we are studying is a limited interaction situation. You are to work as a team to choose the correct answer. We are interested in examining the effects of teamwork and in determining whether people perform better in a group situation. The most important goal of this exercise is that you and your partner come up with the correct answer working as a team. It is not important which member of the team makes the correct initial choice, but it is important that the team come up with the correct answer because you will be marked as a team and not as individuals and there will be a cash prize for high team scores.

As in the first part of the study, you will not be speaking to one another. The panel of buttons in front of you will allow you and your partner to communicate. First, I will show you one slide. You will decide which rectangle has more white area in it. When you decide, indicate by pressing one of the yellow initial choice buttons just as you did in the first part. Once both of you have made your initial choice, your choice will register on your partner’s panel so he/she will know which one you have chosen. Your responses will be relayed to one another simultaneously, and will appear in the second row of lights. Then, looking at the same slide again, make the final choice you believe to be the correct one. Indicate your selection by pressing one of the white final choice buttons on the lower part of the panel. Remember that only your final choice goes toward your team score. For every correct final decision that each member of the team makes, the team earns one point. In other words, a maximum of 2 points can be made on each trial.

There are two things you should be careful of. One is that you don’t press your final choice before you press your initial choice. The second thing is do not wait for your partner’s initial response because it will be relayed to you only after you have made your initial choice.
You will be doing 25 trials with your partner. While this will seem like a lot and you may get a bit tired, you must remember that in the context of a job study, it is important that you continue to try your hardest. At the end, we want to compare how you did as an individual as opposed to when you worked as a team. In addition, we will compare your team’s score to other groups who have performed this task in different interaction contexts. For each group of twenty-five teams, a prize of $20.00 will be awarded to the team with the highest score.

Remember, we are studying how well people communicate and make decisions working together in this job context. So don’t worry about whether your initial choice and your final choice are different. Concentrate on getting the correct answer together. Are there any questions? OK -- let me review:

First, decide which rectangle has more white area in it, and indicate your choice by pressing one of the yellow buttons.

Once both of you have made your initial choice, your partner’s choice will register on the second row of your panel.

Then, looking at the same slide again, make your final choice and indicate this by pressing one of the white buttons.

You will have about eight seconds to make each of these decisions.

Get ready for the first slide.

Show the 25 slides. If necessary, prompt subjects to make choices by saying "your initial choices" or "your final choices". Return to the room.
Now that you have completed the series of slides you are almost at the end of your participation. While we are waiting for the results, there is one more questionnaire for each of you to complete, and then we would like to ask you a few questions.

*Give the questionnaires to the subject and confederate. Collect them when they are complete.*

Now we would like to discuss your scores and opinions with you. SUBJECT, if you would like to stay here, I'll be back in a few moments to ask you a few questions. CONFEDERATE, if you would like to come with me, my assistant will interview you in the other room.

*Complete the interviewer's summary and carry out the debriefing. (The debriefing does not have to be carried out by the experimenter).*
Appendix E: Two-Pattern Contrast Sensitivity Task
Appendix F: Questionnaire A - Experiment One

QUESTIONNAIRE A

You have just finished working in a "No Interaction" context, and now we would like to find out how this first work situation has affected you. We will be asking you a variety of questions, all of which have importance to this job performance study. Please answer each question below, giving us your true feelings. Remember, this is not a test, and there are no right or wrong answers.

All the information you provide is confidential; it will never be associated with you individually. However, your impressions are important as this is the only way we can determine the effects of working in a particular job context.

Participant #:_____
A. PROCEDURES

We'll start by asking you about the way the first part of the study was conducted. We want to know whether the instructions and procedures were clear.

Did you find any of the following things in the first part confusing? Please check the place on each scale that corresponds to your feelings:

(1) Instructions for this first part were:

very clear ________________ very confusing

(2) Operation of the response panel:

very clear ________________ very confusing

B. IMPRESSIONS OF TASK

The questions that follow deal specifically with your impressions of the Contrast Sensitivity task that we have used in this study. For each pair of nearly opposite words below, please check the place on the scale that best represents your feelings.

(1) Is Contrast Sensitivity:

easy ______________________ difficult

creative ______________________ routine

important ______________________ unimportant

intuitive ______________________ learned

confusing ______________________ clear

specific ______________________ general
(2) From my experience with this ability today, I feel that contrast sensitivity is related to (circle the appropriate category/ies):

a) artistic talent  
b) sex  
c) mathematical skill  
d) intelligence  
e) age  
f) socialization  
g) educational level  
h) reasoning ability  
i) life experiences  
j) all of the above  
k) none of the above  
l) it is not yet known

C. AFFECTIVE CONSEQUENCES OF WORK CONTEXT

In this section we wish to examine the emotional effects of the first work situation. These effects are more subjective than the others we are looking at. Try to answer the questions as accurately as you can by checking the place on each scale that best represents your feelings.

In general, how did you feel while working alone?

decisive _____________ indecisive
confident _____________ insecure
involved _____________ uninvolved
interested _____________ uninterested
isolated _____________ sociable
tense _____________ relaxed
motivated _____________ unmotivated
D. CONTEXTUAL EFFECTS ON PERFORMANCE

In this section we would like to find out how this non-interactive work situation has affected your performance. Please answer all of the following questions as accurately as possible.

(1) Out of the twenty trials in the first part:

(a) I estimate that I made ______ correct choices.
(b) I estimate that my partner made ______ correct choices.

(2) Now, rate these estimated performances.

(a) I believe my performance on the twenty trials was:
poor ________________ excellent

(b) I believe my partner's performance on the twenty trials was:
poor ________________ excellent

(3) In any test of ability, standards are set which indicate whether a person does or does not have that ability. For example, on a test it may be decided that 75% and above, OR 85% and above indicates that a person has a certain ability. Conversely, it may be decided that 50% and below, OR 30% and below indicates that a person does not have that ability.

Pretend that you and your same partner here today have completed all 100 trials on the Contrast Sensitivity test. You are now asked to set the standards indicating ability and lack of ability for you and your partner.

1. I would have to make _____ or more correct choices out of 100 to conclude that I definitely have Contrast Sensitivity ability.

2. My partner would have to make _____ or fewer correct choices out of 100 for me to conclude that he/she definitely does not have Contrast Sensitivity ability.
E. IMPRESSIONS OF PERFORMANCE

Now, we would like you to consider the various factors that contributed to your performance and your partner's performance.

(1) How much of your performance was due to:
   a) task difficulty?
      100% ___________________________ 0%
   b) chance?
      100% ___________________________ 0%
   c) effort?
      100% ___________________________ 0%
   d) ability?
      100% ___________________________ 0%

(2) How much of your partner's performance was due to:
   a) task difficulty?
      100% ___________________________ 0%
   b) chance?
      100% ___________________________ 0%
   c) effort?
      100% ___________________________ 0%
   d) ability?
      100% ___________________________ 0%
(3) Overall, how do you feel your contrast sensitivity ability compares with that of your partner? Check the appropriate statement:

My partner's performance was:

- [ ] much better than mine
- [ ] better than mine
- [ ] same as mine
- [ ] worse than mine
- [ ] much worse than mine
## Appendix G: Record Of Influence

**Participant:** Name:_________ Number:______ **Condition:** 1 2 3 4

**Date:** _______ **Time:** _______ **Host:** _______ **Controller:** _______

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<th>CHECK</th>
<th>CHOICE</th>
<th>PARTICIPANT</th>
<th>TRIAL &amp; TYPE #</th>
<th>CHECK</th>
<th>CHOICE</th>
<th>PARTICIPANT</th>
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<td>13 D</td>
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</tbody>
</table>
Appendix H: Questionnaire B – Experiments One and Two

QUESTIONNAIRE B

You have just finished working in a "Limited Interaction" context, and now we would like
to find out how this second work situation has affected you. Most of the questions asked will appear
similar to those asked in the first questionnaire. While this may seem rather repetitive to you, it is
important for us to understand the strength of the contextual effects on job performance.

Once again, all the information you provide is confidential. Please answer all questions
thoughtfully.

Participant #: _______
A. PROCEDURES

We'll start by asking you about the way the second part of the study was conducted. We want to know whether the instructions and procedures were clear.

Did you find any of the following things in part two confusing? Please check the place on each scale that corresponds to your feelings:

(1) Instructions to this second part, working with a partner:

very clear ___________________________ very confusing

(2) Operation of the response panel:

very clear ___________________________ very confusing

B. IMPRESSIONS OF TASK

The questions that follow deal specifically with your impressions of the Contrast Sensitivity task that we have used in this study.

(1) Is contrast sensitivity (check the place on the scale that best represents your feelings):

easy ___________________________ difficult

creative ___________________________ routine

important ___________________________ unimportant

intuitive ___________________________ learned

confusing ___________________________ clear

specific ___________________________ general
(2) From my experience with this ability today, I feel that contrast sensitivity is related to (circle the appropriate category/ies):

a) artistic talent  
b) sex  
c) mathematical skill  
d) intelligence  
e) age  
f) socialization  
g) educational level  
h) reasoning ability  
i) life experiences  
j) all of the above  
k) none of the above  
l) it is not yet known

C. AFFECTIVE CONSEQUENCES OF WORK CONTEXT

In this section we wish to examine the emotional effects of the second work situation. Answer the following questions as accurately as you can by checking the place on each scale that best represents your feelings.

In general, how did you feel while working as a team with your partner?

decisive ___________________________ indecisive

confident __________________________ insecure

involved ___________________________ uninvolved

interested __________________________ uninterested

submissive __________________________ assertive

motivated __________________________ unmotivated
D. CONTEXTUAL EFFECTS ON PERFORMANCE

In this section we would like to find out how this "Limited Interaction" work situation has affected your performance. Please answer all of the following questions as accurately as possible.

(1) How confident were you in your partner's choices being correct?

___ very confident
___ somewhat confident
___ somewhat uncertain
___ very uncertain

(2) Overall, how do you feel your ability at Contrast Sensitivity compares with that of the other person?

I feel that the other person's ability is:

___ much better than mine
___ better than mine
___ same as mine
___ worse than mine
___ much worse than mine
(3) In the 25 trials, how many times did you consider your partner's initial choice before making your final choice?

0 ________________ 25

(4) How many times did you go along with your partner's initial choice?

0 ________________ 25

(5) If you were to do this second part over again, would you prefer to work (check one):

___ alone
___ communicating with your partner through the terminals
___ communicating with your partner face-to-face

E. IMPRESSIONS OF PERFORMANCE

In this section we would like to find out how the "Limited Interaction" work situation influenced your impression of your performance and your partner's performance.

(1) Did you feel that you (check one):

___ had total control over your performance
___ had some control over your performance
___ had little control over your performance
___ had no control over your performance
(2) How much of your performance was due to:

a) task difficulty?
100% 0%

b) chance?
100% 0%

c) effort?
100% 0%

d) ability?
100% 0%

(3) How much of your partner's performance was due to:

a) task difficulty?
100% 0%

b) chance?
100% 0%

c) effort?
100% 0%

d) ability?
100% 0%
In the following series of questions we are trying to get your general impressions of working in a situation where there is limited information and feedback about job performance. For each question, check the answer that best represents you feelings.

<table>
<thead>
<tr>
<th>Question</th>
<th>agree</th>
<th>uncertain</th>
<th>disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>While working as a team in solving contrast sensitivity tasks, it is best to consider the other person’s choices carefully.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I lost interest in working hard in solving the contrast sensitivity task.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreeing as a team regarding the correct decision was more important to me than my own choice.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Even when one person does better or worse than another on contrast sensitivity, most of the time it is just due to chance.</td>
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<td></td>
</tr>
<tr>
<td>My partner was very serious about doing the task well.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was very serious about doing the task well.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
F. FINAL IMPRESSIONS

(1) Overall, how similar or different were you from your partner?

<table>
<thead>
<tr>
<th></th>
<th>different</th>
<th>don't know</th>
<th>similar</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) age</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>b) sex</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>c) languages</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>d) level of education</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>e) ethnic background</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>f) marital status</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

(2) Considering your answers to question (1) above, do you feel that you were at an advantage or a disadvantage in performing the task?

advance ____  disadvantage ____  don't know ____

Please elaborate: ____________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

(3) Please give us your comments on the study's procedures, and your experience here today.

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________
Appendix I: Post-Experimental Interview

INTERVIEWER'S SUMMARY

Name of subject: ____________________________________________

Subject Number: ________

Condition: 1) MDE  2) MMS  3) FDE  4) FSS

Interviewer's Final Disposition: Retain ________

Unsure ________

Drop ________

Comments:

________________________________________________________________________

________________________________________________________________________

1) Run Review

List any problems encountered with the experimental procedures during this session:

________________________________________________________________________

________________________________________________________________________

120
2) **Questionnaire A** *(Check while participants are filling out Questionnaire B)*

Review the following questions for manipulation checks:

B - importance
C - involvement, motivation & interest
D - 1 & 3

Make sure all the questions have been completed. Pursue all problems and write any comments in the questionnaire.

3) **Questionnaire B**

Review the following questions for manipulation checks:

B - 1 & 2
C - involvement, motivation & interest
D - 3 & 5

F1 - make sure this is answered as expected, paying particular attention to 1C and 1E. If an unexpected answer is given (e.g. is subjects in condition 1 & 3 answer "different", or subjects in condition 2 & 4 answer "similar" to questions 1C and 1E) have them elaborate their answers.

4) **Manipulation Checks**

**Task Orientation:**

1. How did you make your decisions when you were working alone? Did you rely on intuition? Did you develop a strategy?

The subject tried to succeed _____ did not care _____

Overall task orientation:

low _____________________________ high

**Collective Orientation**

When you were working with your partner, how did you make your decisions?
Was it helpful having feedback from your partner? yes ___ no ___

Did knowing your partner's choices help you to make your decisions? yes ___ no ___

How often did you use your partner's choices to make your decisions? Would you say you used your partner's response:

all of the time ___    seldom ___
most of the time ___    never ___
some of the time ___

How often did you consider your partner's choices to make your decisions? Would you say you considered your partner's response:

all of the time ___    seldom ___
most of the time ___    never ___
some of the time ___

The subject was ___ was not ___ collectively oriented.

Overall Collective Orientation:

low __________________________ high
Ethnic Manipulation

What do you remember about your partner? If the subject does not mention ethnicity, ask the following questions:

What was your partner’s name?
How old was your partner?
Do you remember your partner’s sex?
Do you recall what nationality your partner was?

The ethnic manipulation: worked _____ did not work____.

*F2* - be sure respondent has elaborated on his/her response. If subject answered "Disadvantage" or "Don’t Know", ask:

Under what circumstances would you anticipate being at an advantage?

If ethnicity was not mentioned in the elaboration, prompt by suggesting variables such as age, gender, ethnicity, level of education. For example:

How do you think you would have acted if your partner was considerably older than yourself?.....or if your partner was a graduate student?.....or if your partner was of a different ethnic background? Record comments concerning ethnicity.

Suspicions

Do you have anything you want to ask me about the study? Is there anything that bothered you?

Note any suspicions:
If the subject had suspicions, ask: How did your suspicions affect your behavior during the study?

suspicious________________________not suspicious

What was the subject's general orientation to the study?

involved________________________uninvolved
cooperative_______________________uncooperative
satisfied________________________unsatisfied
Appendix J: Debriefing Form

POST EXPERIMENTAL EXPLANATION

Now that the experiment is over, we would like to tell you a few things about the study you just participated in and answer any questions you might have.

First, what we are really studying is the manner by which people make decisions. In other words, what influences people's decisions? We need to create a situation in which a person is required to make a decision, and it is very difficult to study decision making in a natural setting. Therefore, we decided to use a laboratory setting so that we could have people confront situations where they are required to make a decision.

The slides were shown to you to give you something to make judgements about and disagree upon. In fact, there is no correct answer. However, it is difficult, if not impossible, for the participant to notice this in the short time given. One would need a fair amount of time with a ruler in order to discover this fact.

In order to see how your decisions were made, we had to provide you with a number of disagreements. To do this, we controlled the feedback you received. A machine took the answers from your panel and gave you an agreement or a disagreement in a pre-arranged schedule, regardless of what your partner answered. Everyone who participates in this study receives the same pattern of disagreements (numbering 20) and agreements (numbering 5).

It may be evident to you that Contrast Sensitivity is not a real ability, but rather a procedure used by social scientists to examine how people make decisions when they disagree. We
are interested in what affects the process of resolving disagreements, and in particular we are interested in looking at how knowing background information about an individual influences decision making. All participants are randomly assigned to one of four situations. In each situation, the participant is given a different form at the beginning of the study which gives information about his/her "partner". Your partner is in fact part of the research team.

Everyone who takes part in this study receives false information. This is the only way that we can objectively determine how disagreements are resolved. We hope you now understand why we could not tell you at the beginning that the ability really does not exist and that the task has no correct answer. If you had received this information at the beginning, it is likely that it would have changed your behavior.

In the second part of the study, you were told that for each set of twenty-five teams, there would be a prize of $20.00 for the team with the highest score. The real purpose of this was to motivate you to perform well. Nonetheless, you will now be eligible for a lottery with a one in twenty-five chance to win that $20.00. Of course this is in addition to the participant lottery which provides you with a one in thirty chance to win $50.00. Good Luck!

If you have any questions, please ask them at this time.

THANK YOU AGAIN FOR YOUR PARTICIPATION!
Appendix K: Secrecy Commitment Form

Name:_____________________

The above named person agrees not to disclose any information which could potentially jeopardize the success of the study in which he/she participated at the Small Groups Laboratory of the UBC Department of Anthropology and Sociology. In particular, the above named agrees not to mention anything about the deception aspects of the study.

Date:_______________ Signature:___________________________. 
# Appendix L: Computer Printout of Scores

**FILE:** JPPROJ.DAT  
**OUTPUT FROM SERIES:** 9  
**TEST BEGINS**

**UBC COMPUTING CENTRE**  
**SMALL GROUPS LABORATORY**  
**PATTERNS:** FIRST 20 ONLY

**JOB PERFORMANCE PROJECT**  
**CONTRAST SENSITIVITY TEST**

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**TEST RESULTS:**

**PARTICIPANT A:** CORRECT 13 TIMES  
**PARTICIPANT B:** CORRECT 11 TIMES

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NO DATA ENTRY ERRORS - TEST COMPLETED - ELAPSED TIME: 7 MIN 31 SEC  
$SIGNOFF$
You have just finished working in a "No Interaction" context, and now we would like to find out how this first work situation has affected you. We will be asking you a variety of questions, all of which have importance to this job performance study. Please answer each question below, giving us your true feelings. Remember, this is not a test, and there are no right or wrong answers.

All the information you provide is confidential; it will never be associated with you individually. However, your impressions are important as this is the only way we can determine the effects of working in a particular job context.

Participant #:______
A. PROCEDURES

We'll start by asking you about the way the first part of the study was conducted. We want to know whether the instructions and procedures were clear.

Did you find any of the following things in the first part confusing? Please check the place on each scale that corresponds to your feelings:

(1) Instructions for this first part were:
very clear ____________________ very confusing

(2) Operation of the response panel:
very clear ____________________ very confusing

B. IMPRESSIONS OF TASK

The questions that follow deal specifically with your impressions of the Contrast Sensitivity task that we have used in this study. For each pair of nearly opposite words below, please check the place on the scale that best represents your feelings.

(1) Is Contrast Sensitivity:
easy ________________________ difficult
creative ______________________ routine
important ______________________ unimportant
intuitive ______________________ learned
confusing ______________________ clear
specific ______________________ general
(2) From my experience with this ability today, I feel that contrast sensitivity is related to (circle the appropriate category/ies):

a) artistic talent  
b) sex  
c) mathematical skill  
d) intelligence  
e) age  
f) socialization  
g) educational level  
h) reasoning ability  
i) life experiences  
j) all of the above  
k) none of the above  
l) it is not yet known

C. AFFECTIVE CONSEQUENCES OF WORK CONTEXT

In this section we wish to examine the emotional effects of the first work situation. These effects are more subjective than the others we are looking at. Try to answer the questions as accurately as you can by checking the place on each scale that best represents your feelings.

In general, how did you feel while working alone?

decisive _________________ indecisive
confident _________________ insecure
involved _________________ uninvolved
interested _________________ uninterested
isolated _________________ sociable
tense _________________ relaxed
motivated _________________ unmotivated
D. CONTEXTUAL EFFECTS ON PERFORMANCE

In this section we would like to find out how this non-interactive work situation has affected your performance. Please answer all of the following questions as accurately as possible.

(1) Out of the twenty trials in the first part:

(a) I made _____ correct choices.

(b) My partner made _____ correct choices.

(2) Now, rate these performances.

(a) My performance on the twenty trials was:

poor ___________________________ excellent

(b) My partner's performance on the twenty trials was:

poor ___________________________ excellent
(3) In any test of ability, standards are set which indicate whether a person does or does not have that ability. For example, on a test it may be decided that 75% and above or 85% and above indicates that a person has a certain ability. Conversely, it may be decided that 50% and below or 30% and below indicates that a person does not have that ability.

Pretend that you and your same partner here today have completed all 100 trials on the Contrast Sensitivity test. You are now asked to set the standards indicating ability and lack of ability for you and your partner. In answering this question, refer to question (1) in section D (previous page). Using this information, check one of the following statements, and then follow the instructions that apply to you. **ANSWER ONLY THOSE QUESTIONS WHICH APPLY TO YOU!**

( ) If your score on these trials was higher than your partner’s, answer questions A1 and A2 below.

( ) If your score on these trials was lower than your partner’s, answer questions B1 and B2 below.

( ) If your score on these trials was the same as your partner’s, answer all the questions – i.e., A1, A2, B1 and B2.

A1. I would have to make _____ or more correct choices out of 100 to conclude that I definitely have Contrast Sensitivity ability.

A2. My partner would have to make _____ or fewer correct choices out of 100 for me to conclude that he/she definitely does not have Contrast Sensitivity ability.

B1. I would have to make _____ or fewer correct choices out of 100 to conclude that I definitely do not have Contrast Sensitivity ability.

B2. My partner would have to make _____ or more correct choices out of 100 for me to conclude that he/she definitely has Contrast Sensitivity ability.
E. IMPRESSIONS OF PERFORMANCE

Now, we would like you to consider the various factors that contributed to your performance and your partner’s performance.

(1) How much of your performance was due to:
   a) task difficulty?
      100% 0%
   b) chance?
      100% 0%
   c) effort?
      100% 0%
   d) ability?
      100% 0%

(2) How much of your partner’s performance was due to:
   a) task difficulty?
      100% 0%
   b) chance?
      100% 0%
   c) effort?
      100% 0%
   d) ability?
      100% 0%
(3) Overall, how do you feel your contrast sensitivity ability compares with that of your partner? Check the appropriate statement:

My partner's performance was:

_____ much better than mine
_____ better than mine
_____ same as mine
_____ worse than mine
_____ much worse than mine
Appendix N: Rules For Rejection:

Subjects will be eliminated from analysis:

1. If they report themselves to be at the lowest levels of motivation, involvement and interest on both questionnaires.

2. If standards reported on Questionnaire A are unreasonably high or low (e.g., 100% or 0%).

3. If subjects in Experiment One estimate their score or that of their partner to be unreasonably high or unreasonably low (e.g., 20 or 0).

4. If subjects report themselves to have considered their partner’s response between 0 and 5 times on Questionnaire B.

5. If subjects in Experiment Two misreport their score or that of their partner by more than one point on Questionnaire A.

6. If subjects working with an East Indian partner report that their partner’s ethnic background is the same as their own on Questionnaire B.

7. If the ethnic background or the gender of the partner was not noticed.

8. If subjects do not meet the White criteria (on the basis of visual cues and/or country of birth reported other than Canada, United States or Western Europe).

9. If suspicions are noted that affected the subject’s behavior.

10. If technical error disrupts the experiment.