

ETHNICITY, EXPECTATIONS, AND ATTRIBUTIONS:  
A THEORETICAL REVIEW

by

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### **Abstract**

This thesis examines the effect of ethnicity on assessments of achievement outcomes, and presents a theoretical explanation using Foschi's reformulation. The reformulation integrates aspects of attribution theory and status generalization theory. It proposes that when a higher status performer and a lower status performer are equally successful at a task, the success of the former will tend to be attributed to ability more than the success of the latter. Also, when the two performers are equally unsuccessful at a task, the performance of the lower status person will tend to be attributed to lack of ability more than the performance of the higher status person. The propositions are tested for ethnicity by collecting evidence from attribution studies dealing with ethnicity and assessment of performance outcomes. The findings indicate that there is substantial support for the propositions. Since these have not been directly tested, an experiment is proposed. In the final section of the thesis a standardized experimental format such as the one used in expectation states research is presented.

## Table of Contents

List of Tables .....	iv
Acknowledgements .....	v
INTRODUCTION .....	1
CHAPTER I.    ATTRIBUTION THEORY .....	6
A. Overview and Basic Principles of Attribution Theory .....	6
B. Success and Failure Outcomes and Causal Attributions .....	11
C. Gender Differences and Causal Attributions for Success and Failure .....	14
CHAPTER II.   STATUS GENERALIZATION THEORY AND THE REFORMULATION OF THE ATTRIBUTION HYPOTHESES .....	18
A. Status Generalization Theory .....	18
B. Status Generalization and Attributions – A Reformulation .....	26
CHAPTER III.  ASSESSMENT OF THE REFORMULATION REGARDING ETHNICITY..	36
A. Guidelines for the Selection of Articles .....	36
B. General Summary of the Studies Reviewed .....	39
C. Analysis and Assessment .....	43
D. Reformulation Reconsidered .....	51
CHAPTER IV.   DESIGN FOR AND EXPERIMENT ON ETHNICITY, STANDARDS, AND ATTRIBUTIONS TO ABILITY .....	53
A. Overview of Experiment and Predictions .....	54
B. Procedures for an Experiment on Ethnicity .....	60
CONCLUSIONS .....	63
BIBLIOGRAPHY .....	65
APPENDIX A. Reviews of Other-Attribution Studies .....	76
APPENDIX B. Reviews of Self-Attribution Studies .....	80
APPENDIX C. Instructions to the Subjects .....	85
APPENDIX D. Booklet 1 .....	89
APPENDIX E. Booklet 2 .....	94
APPENDIX F. Instructions for Debriefing .....	106

### List of Tables

Table 1. Evidence for Hypothesis 1 from Other–Attribution Studies .....	43
Table 2. Evidence for Hypothesis 1 from Self–Attribution Studies .....	46
Table 3. Evidence for Hypothesis 2 from Other–Attribution Studies .....	48
Table 4. Evidence for Hypothesis 2 from Self–Attribution Studies .....	50
Table 5. Overview of the Experiment .....	60

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## INTRODUCTION

In multi-ethnic societies such as Canada and the United States, ethnicity has often been found to determine social status (Porter, 1965; Glazer and Moynihan, 1963; Pineo, 1977). In many of these societies, despite an emphasis on an ideology of equality, differential treatment of various ethnic groups persists. For example, there is evidence which points to the existence of discriminatory evaluation of overall achievements by members of subordinate groups (Fernandez, 1975). In organizational settings, this is observed in the unequal rate of starting wages and subsequent promotions. In education, it surfaces in the form of students receiving different levels of encouragement from teachers. In such cases, evaluation is based on ascribed characteristics derived from the individuals' ethnic membership rather than on the achievement itself. Practices such as these maintain stereotypical assumptions about an ethnic group, even in situations where achievement by a group member is contradictory to ascribed characteristics of the group. Although much work has been directed towards the study of this phenomenon – for example in management (Zimpel, 1971; O'Toole, 1973) – little emphasis has been placed on theoretical explanation. Some studies have used attribution theory as a basis for investigating ethnicity and assessment of achievement (Corenblum, 1977; Orpen, 1980; Boski, 1983), but there has been neither consensus on the propositions nor consistency in the findings.

This thesis presents a theoretical explanation for the presence and maintenance of ethnic inequality in achievement situations. In order to do this, the work focusses on how people assess personal achievements of performers who are of different ethnic backgrounds. The objective of this thesis is to investigate the relationship between ethnicity of performer and evaluations made for his/her achieved outcomes.

At this point, terms that are central to the investigation should be defined. For the purposes of this thesis, "personal achievements" are interpreted as objectively defined successful or unsuccessful performances at a task. In the case of ethnicity, the thesis is not so much interested in what constitutes ethnic differences as in how visual and inferred cues are used by people to assume ethnic group membership of others. Thus, ethnicity is used here as an inferred characteristic.

In this context, racial characteristics are seen as leading to assumptions about ethnic group membership. Thus, race is considered to be one aspect of ethnicity.

Studies in the area of ethnicity and assessment of achievement have concentrated on providing empirical evidence of specific phenomena rather than theoretical explanations. Foschi (Foschi and Plecash, 1983; Foschi, forthcoming) has done theoretical research on how people assess males' and females' successful and unsuccessful performance outcomes. She identifies gender of performer as a variable that affects the assessment of a performance by an observer. Although the focus of her work is gender, it is relevant to this thesis. This is because she investigates the effects of ascribed characteristics in an achievement situation, identifies inequality of assessment that is based on those ascribed characteristics, and provides a theoretical explanation for the phenomenon. Gender and ethnicity are both terms that can conjure up stereotypes and ascribed characteristics. To that extent, they are interchangeable. Thus, in this thesis, Foschi's theoretical explanation is applied to ethnic differences. It is used as a foundation on which to build propositions regarding ethnic inequality in achievement.

Foschi identifies two theories that deal in part with the effect of gender on performance evaluations: attribution theory and status generalization theory. Attribution theory investigates the effect of gender on causal explanations for performance outcomes. Status generalization theory looks at the relationship between gender and performance expectations.

Attribution theory presumes that people use causal accounts to interpret everyday events and behavior, including performance outcomes. It is also assumed that individuals employ these interpretations to predict and assess similar events and behavior. In the area of performance outcomes, this theory investigates causal accounts (i.e. attributions) made to both successful and unsuccessful outcomes. Performance outcomes are attributed to such causal factors as ability, effort, luck, and task difficulty (Weiner et al., 1972). Since the 1970's, much work has appeared in this area, and several reviews have summarized its growth and development (see Harvey, Ikes, and Kidd (eds.), 1976, 1978, 1981; Kelley and Michela, 1980; Zuckerman, 1979). A number of studies in this field deal with the issue of differences in attributions made to similar performances by a male and a female. These studies hypothesize a tendency for successful males to be credited with ability, while the performances of successful females are attributed to non-ability factors, such as effort and luck. It is also predicted that unsuccessful performances by



females will be attributed to lack of ability, while the same performance by a male will be attributed to other factors. Since having or lacking the ability to perform a task successfully is considered the most important aspect in judging the competence of an individual, it is clear that males are expected to be given favorable assessments for their performances but females are not. On the whole, results show mixed support for these predictions.

Status generalization theory investigates status characteristics and performance expectations associated with the states of those characteristics. A status characteristic is a feature of an individual around which cognitions, evaluations, and expectations of the individual are formed. It consists of two or more differentially evaluated states: one state being seen as higher and better than another. This theory, as originally formulated, is concerned with how a status order develops in a group when members possess different states of a status characteristic. This status order is reflected in the power and prestige order of the group, which consists of action opportunities, performance outputs, communicated evaluations, and influence over group decisions. The theory takes a situational approach and is interested in the effect of the status characteristic on the group's power and prestige order in certain situations. Scope conditions define the range of applicability of the theory. These are that subjects working in a group are i) distinguished by a single status characteristic, ii) involved in a task which requires a single valued ability, iii) aware of what constitutes success and failure in performing the task, iv) task-oriented, and v) group oriented. The theory proposes that under these conditions, an individual with the higher state of a status characteristic is higher in the power and prestige order of the group than an individual with the lower state. Thus, higher status members have more opportunities to perform, often take those opportunities and are given favorable evaluations, and have greater influence in the group than lower status members. Studies on gender reveal that males are higher in the power and prestige order than females. This indicates that gender is a status characteristic in some situations.

Both theories deal with gender in a similar manner: as a variable that affects performance evaluations. Both have found that in some achievement situations, males are favored over females. Foschi integrates aspects of the two theories that are relevant to gender differences, and to the effects of this variable on expectations and evaluations of performance. In her reformulation, gender and performance outcomes are the independent variables, and attributions for the outcomes the dependent variable. On the one hand, the integration introduces scope conditions to attribution theory; on the other, it extends status

generalization theory to include performance outcomes. Two hypotheses have been proposed for gender.

- 1) When a male and a female are equally successful at an achievement task, a) the success of the male is more likely to be attributed to ability than the success of the female, and b) the success of the female is more likely to be attributed to non-ability factors than the success of the male.
- 2) When a male and a female are equally unsuccessful at an achievement task, a) the failure of the female is more likely to be attributed to lack of ability than the failure of the male, and b) the failure of the male is more likely to be attributed to non-ability factors than the failure of the female.

Foschi tests the hypotheses using attribution studies which investigate gender and performance outcomes (Foschi and Plecash, 1983, for gender; Foschi, forthcoming, for gender in cross-cultural studies). The overall support for the hypotheses is weak and she discusses several methodological reasons for this. In this thesis, these reasons are taken into account, and revisions to strengthen the reformulation are suggested. The revised propositions are tested for ethnicity. Evidence pertaining to these propositions is accumulated using the same method as in Foschi (forthcoming). Findings from attribution studies dealing with ethnic differences and assessment of performance outcomes are reviewed and compared against the hypotheses.

Finally, previous work on the reformulation has involved only analytical work, and no test of the propositions has yet been carried out. In this thesis, an experimental design is introduced. This is proposed as a standard format for future research in the area.

Thus, the method used in this thesis to investigate the relationship between ethnicity of the performer, and evaluations made for the performer's achieved outcomes is as follows:

1. To outline the essential elements of attributions theory and status generalization theory as they relate to ethnicity and assessment of performance outcomes.
2. To present Foschi's reformulation, and suggest revisions where appropriate.
3. To apply the revised reformulation to ethnicity, and to substantiate the validity of the propositions.

4. To present an experimental design to test the reformulation in the case of ethnicity.

In sum, this thesis provides a theoretical explanation for the effect of ethnicity on achievement evaluations. Since there is limited theoretical work on the relationship between stereotypical beliefs and attributions, this thesis will add to the theoretical development of the area. Also, the range of the propositions of Foschi's reformulation is expanded by applying them to the case of ethnicity. Lastly, since only empirical tests can give evidence for the usefulness of the approach, an experimental design is presented. This is suggested as a standard model for future research to do with status differences and attributions for success and failure.

## CHAPTER I. ATTRIBUTION THEORY

### A. Overview of and Basic Principles of Attribution Theory

Attribution theory is a cognitive and affective approach in social psychology that centers around the individual. Its initial development came with the publication of Heider's Psychology of Interpersonal Relations (1958), and subsequently gained prominence in the 1970's. It is based on the assumption that individuals conceive of their social environment as consisting of events and behaviors, and their causes. The theory deals with the perception of causation, and the consequences arising from such perceptions. These perceptions are gauged by the choice of factors an individual uses to explain an event or a behavior. When the individual perceives certain factors to be the cause, he/she attributes the event to them. This process is known as "making attributions".

The propositions in the theory range over a wide variety of research areas. These include motivation (Weiner and Kukla, 1970), achievement (Forgas, Morris, and Furnham, 1982), self-esteem (Sigall and Gould, 1977), learned helplessness (Abramson, Seligman, and Teasdale, 1978), and social distance (Mann and Taylor, 1974). In fact, many studies incorporate more than one area, such as motivation and achievement, and investigate their combined effects on attributions. For the purposes of this thesis, only aspects of the theory concerned with achievement are discussed. Research on achievement involves investigating attributions made for performance outcomes. These can be task specific such as school exams, or general as in lifetime achievements. The individual who makes the attributions is known as the attributor. The attributor can be an observer explaining the achievements of others (other-attribution), or the performer explaining his/her own performance (self-attribution). Within attribution theory, a distinction is made concerning other-attributions and self-attributions, and studies usually tend to be concerned only with one or the other. This thesis looks at both with an emphasis on other-attributions. These are considered to be of a more social nature as they involve at least two individuals, a performer and an attributor. They are based on situations in which comparison of performances is possible and differences in evaluations may be observed. This section deals with the basic principles of the theory as they apply to achievement outcomes. It should be noted that the various principles discussed here are equally applicable to other areas of attribution.

Kelley and Michela (1980) describe how the process of attributions can be divided into two separate stages, the antecedents and the consequences of attributions. They explain that in the antecedent stage, certain information, beliefs, and motivations concerning a performance and the circumstances of its occurrence are utilized by individuals to infer its causes. Attributions are made according to the manner in which this information is processed. The consequences of attributions refer to the degree of affect that is experienced by the attributor and the performer. This is observed in behavioral attitudes and expectations for future performances. Both stages are important to this thesis since it focusses on the process by which attributions are made, and expectations are formed.

In the antecedent stage, the theory postulates that there is an instrumental organizing motive for making attributions. It is assumed that individuals provide explanations for achievements in order to utilize them in understanding the relationship between those achievements and the social environment. According to the theory, making attributions contributes to gaining and maintaining a sense of control over situations. Thus, if the attributor perceives aspects of the social environment in a manner accepted by society, attributions tend to be used to sustain those beliefs regarding the status quo. Beliefs about aspects of the social environment differ from one person to another, and a notion concerning the status quo, such as male superiority, may be important for one but not for another. Since this is the case, attributions reflect each individual's perceptions of his/her social environment.

There are several concepts that are central to attributions in achievement situations. Three of these concepts are discussed next.

The first is the concept of internality and externality. This dimension was proposed by Heider (1958), and later expounded by Weiner et al. (1972), notably in the area of success and failure outcomes. These authors stipulate that in the process of explaining another person's performance outcome, one strives to interpret the causes as either internal or external to the actor. Internality is when characteristics of the performer are considered to be responsible for the outcome. Externality is when other characteristics not associated with the performer, such as type of task or situation, are responsible. Characteristics of the performer are called internal factors, and characteristics not associated with the performer are called external factors. When internal factors are used to explain a successful performance, the performer is affected positively. In failure, the performer is affected negatively by an internal attribution. An external

attribution reduces positive affect in success and negative affect in failure.

The second concept is based on the idea that three variables influence attributions: information about i) performance outcome, ii) the actor, and iii) the situation. The principle of covariation (McArthur, 1972; Zuckerman, 1979) explains the relationship between the information used to make attributions, and the types of resulting attributions. The principle deals with the types of information required to make attributions as defined by Kelley (1967). These are:

- a) consensus information (whether the outcome is shared by others or not)
- b) distinctive information (whether the outcome is observed in only one specific situation or in many)
- c) consistency information (whether the actor performs similarly in other situations or not)

In an achievement situation, an outcome on which there is consensus is attributed to characteristics of the task. Otherwise, it is attributed to characteristics of the performer. For instance, if the majority of students taking a maths test score over 90%, the test is perceived as being easy and success on the test is attributed to ease of task (and failure to characteristics of the performer). On the other hand, if the majority of students score below 50%, the test is perceived to be difficult so that success is attributed to the ability of the individual (and failure to characteristics of the test).

The degree of distinctiveness of the outcome also determines the type of attributions made. An example of this is when a nationwide exam such as the LSAT is given, and the results show that the average score for one town is exceptionally high or low. That town is regarded to be unique in its average score, and the performance outcomes of the individual members of that town are attributed to characteristics of the town and not to themselves. When the average score is exceptionally high, a successful outcome that is attributed to internal factors in another town is attributed to the situation in the unique town.

Finally, an outcome that is consistent with an individual's past performances is attributed to characteristics of the performer, whereas an outcome that is inconsistent is seen as having its causes in the situation. The three types of information are commonly combined in the process of making attributions. Despite the systematic approach afforded by this principle, attributions are often influenced by beliefs which distort the objectivity of the process. This is especially so for situations that do not provide enough information. When there is not enough information for the consensus, the distinctive, or the consistency

process, attributors may resort to other sources, such as beliefs, to make assessments. For example, Friend and Neale (1972) did a study involving Black and White children making attributions for their own performance outcomes at a reading test. In the following year, Friend and Wood (1973) studied the attributions made by university students, enrolled in education, evaluating the same outcomes. No ethnic differences were found in attributions made by subjects in the first study. However, ethnicity was used as a differentiating variable by subjects in the second, and the success of the Blacks was attributed more to external factors and less to internal factors than was the same performance outcome of Whites. This indicates that subjects in the Friend and Neale study did not take their own ethnicity into consideration in making attributions. On the other hand, the education students in the second study regarded the information concerning ethnicity to be relevant to the situation and made attributions according to the beliefs they held about the two ethnic groups. Since the children in the first study had previous information about their own achievement capacities, they did not need to use extra information. In the second study, the subjects only had information regarding the single task and the background of the children. This was not enough to make an assessment, and they resorted to beliefs in order to explain the outcomes.

The last concept is that of causal schemata. This constitutes the final part of the attribution making process and deals with the consequences of attributions. The use of causal shemata is also influenced by beliefs held by the attributor about the performer and the situation. Basically two kinds of causal schemata have been identified by Kelley (1972), the "multiple sufficient causal schema" and the "multiple necessary causal schema". They both provide a description of how two or more causes can be combined to produce a certain effect. For instance, given that there are two possible causes, A and B, to explain an outcome, if the attributor believes that either one or the other is sufficient to produce the outcome, he/she activates the multiple sufficient causal schema. If the attributor perceives that both are necessary to produce the outcome, the multiple necessary causal schema is activated. In the case of A being an internal cause and B an external one, if a successful outcome is attributed only to A using the multiple sufficient causal schema, then the maximum positive affect for the performer is obtained. When B is likewise used, then the affect is minimized. A more balanced attribution results when the multiple necessary causal schema is activated and both A and B are combined to explain the outcome.

In certain situations, attributions can be seen as a form of subjective evaluation that stem from beliefs held by the attributor about the performer or the situation. The principle of covariation has shown that when enough information is provided, attributions are usually founded on specific background information concerning the performer. However, when there is only limited information, the source of attributions may be vague as in stereotypes. In situations in which the attributor requires more information, attributions reflect preexisting suppositions and expectations, and offer a way of sustaining those beliefs. The concept of causal schemata indicates that the selection and use of relevant information in making attributions is influenced by such beliefs held by the attributor.

So far, most work in attribution has concentrated on the individual, investigating subjects making attributions for either their own, or another's performance. Recently, some research has appeared supporting the importance of group identity in the attribution process (Deschamps, 1983; Bond, 1983). Examples of such group identity can be found in the work done on gender and ethnic differences, as well as on smaller group units such as teams. Gender and ethnicity are now recognized as social categories that produce similar attributions across subjects and situations. It is postulated that the perceptions of one individual observing another are dictated by the amount of information available and stereotypical beliefs that are held about the characteristics of the performer. Stereotypes are activated from the identity of the group to which the performer is (or is seen to be) affiliated. Thus, in situations such as a task performance, the individual perceives that the other is pre-disposed by characteristics of his/her group to behave or perform in a given manner. Attributions made by the individual for the performance outcome are affected by these beliefs and are not necessarily objective. So far, very little theoretical work has been done combining stereotypes, beliefs, and attributions. A theoretical path connecting the three is presented in the next chapter.

In this section, the process of making attributions was described. It has been shown that when limited information is available to the attributor, attributions are based on beliefs, which in turn may contribute to unequal assessments. If those beliefs are influenced by the status quo, then, where inequality exists in the social structure, this is reflected in attributions made by the attributor. In the next section, propositions for attributions to success and failure outcomes are presented and discussed.



## B. Success and Failure Outcomes and Causal Attributions

Of special interest to this thesis is the area of causal attributions for success and failure outcomes on achievement related tasks. The reason for this is that success and failure on such tasks are often objective evaluations of performance, using established criteria. For example, at U.B.C., success in a course is defined as 80% and above, while failure is 50% or below. This evaluation does not change depending on the amount of information available about the student (performer) or the course (situation). Attributions, on the other hand, can be subjective judgements which are based on the attributor's beliefs. This is especially the case when there is limited information concerning the performer and the situation. Thus, when attributions are made to a performance that is recognized either as a success or a failure, the subjectivity of the attributor can be maximally observed. In other words, the attributor's use of attributions to maintain a sense of stability is most obvious. For example, a task outcome of 80% that is objectively defined as a success can be attributed to internal characteristics of the performer, and thereby create positive consequences for him or her. On the other hand, if the performance is attributed to external factors, the positive consequences for the performer are reduced. A corresponding principle applies for failure. Attributions made in this context are used by the attributor to maintain a sense of consistency, especially in the face of contradictory results. This is important to keep in mind when contemplating the possible effects of attributions on discriminatory practices.

Weiner et al. (1972) propose that individuals utilize four factors to predict and interpret the outcome of an achievement related event. The four causal factors are ability, effort, luck, and task difficulty. Ability is inferred from previous performance so that repeated success or failure at similar tasks indicates the amount of ability the individual possesses. Also, attributions to ability are made when the outcome is not consistent with social consensus. If an individual succeeds at a task at which others have failed, the outcome is attributed to having ability, whereas when an individual fails at a task at which others have succeeded, the outcome is attributed to lack of ability. Task difficulty is also inferred from consensus information. When many other individuals succeed at the same task as the performer, the success is attributed to the easiness of the task. If the performer fails at a task at which many others have also failed, the outcome is attributed to the difficulty of the task. Effort and luck attributions are more difficult to explain in terms of the various information principles. They are more influenced by the

attitudes and beliefs of the attributor than the previous two factors. The consequences of the two are quite specific and instrumental. Attributions to effort regulate rewards and punishments directed towards the performer. In success, one is praised more when the outcome is attributed to effort than when it is attributed to any other factor. In failure, lack of effort is punished more than even lack of ability (Sohn, 1977; Covington and Omelich, 1979). Luck is often used to infer lack of ability, and low motivation of the performer, as well as low esteem for that individual. (Bell et al., 1976; Deaux, White, and Farris, 1976). The combined use of these factors is an indication of the cognitive and affective reactions of the attributor towards the performer's outcomes.

The four causal factors have played an important role in operationalizing locus of causality (internality, externality), and have also provided values for two other dimensions, locus of stability and locus of control, that are later additions to the attribution framework. This classification system has been used extensively in the attribution literature and the three dimensions of causal attributions are utilized to interpret reactions to performance outcomes.

- a) *Locus of Causality*—whether the cause of a performance outcome is considered internal or external to the performer. Of the four causal factors, ability and effort originate within the individual and are therefore internal factors. Luck and task difficulty are situational and therefore external factors. This dimension affects mainly the strength of affective reactions for both the performer and attributor, such as high and low esteem.
- b) *Locus of Stability*—whether the cause of a performance outcome is considered stable and consistent, or unstable and variable over time. Ability and task difficulty are stable factors, while effort and luck are considered unstable. This dimension affects achievement expectancy since if an individual performs similar tasks over a period of time and is consistently successful, then he/she is seen as having ability at the task and future success is predicted. If an individual is sometimes or rarely successful at the task, he/she is seen as not trying, having bad luck, not having ability, or a combination of the three, and future success is not predicted.
- c) *Locus of Control*—this is not as commonly referred to as the above two dimensions. It determines whether or not the cause of the outcome is susceptible to the performer's volition. Effort is controllable, but ability, luck, and task difficulty are not. This dimension affects the amount of respect for the individual and evaluations made about that person. Effort is regarded as socially desirable, and

an individual who tries hard either in success or failure is rewarded more than one who does not try hard in either case.

Within the attribution literature, it is difficult to find a general hypothesis for causal attributions to performance outcomes. This is a major weakness of the theory. There is a lack of basic propositions from which hypotheses may be deduced. There is one exception. Weiner et al. (1972) state that success is attributed more to internal factors than failure, and that failure is attributed more to external factors than success. This proposition takes a motivational approach utilizing the notion of instrumentality in self-attributions. Thus, internal attributions to success and external attributions to failure are seen as evidence of self-enhancement and the self-serving biases.

According to the self-serving bias, the performer has a preference for attributing desirable actions such as success at a task to dispositions within him/herself (internal), thereby creating or maintaining a sense of self-esteem and obtaining positive recognition from others. Undesirable actions such as failure are attributed to the environment (external), and the performer thereby relinquishes responsibility for the action. On the other hand, Covington and Omelich (1979) use a different dimension – locus of control – in their discussion of the effects of self-worth theory on attributions. They found that in order to maintain a sense of self-worth in failure, individuals attribute their failure outcomes to lack of effort, thereby creating a possibility of high ability, and a possibility for future success. Other studies suggest that such motivational explanations are not sufficient since success is attributed to internal factors and failure to external factors not only by performers themselves (self-attribution) but also by others (other-attribution) (Nicholls, 1975). These studies do not explain situations in which individuals make attributions to performances by others. This puts into question the validity of Weiner's propositions, and underlines the need for a revised formulation.

Gender and ethnicity have been recognized as social categories within attribution theory. As such, they are seen as influencing attributions according to pre-disposed characteristics that are associated with them. Although there are no reviews of work on ethnicity and attributions, several have been done on gender and attributions. In the next section, a summary of the latter is presented to give the reader an idea of the work done on a category similar to the one that is the focus of this thesis.

### C. Gender Differences and Causal Attributions for Success and Failure

Within the attribution literature, there is substantial interest in gender differences concerning causal explanations for success and failure outcomes. This is evident from the amount of research accumulated in the area since the seventies (see Zuckerman, 1979; Wallston and O'Leary, 1981; Frieze et al., 1982; Foschi and Plecash, 1983; Foschi, forthcoming, for reviews). The interest arises from the observation that males and females do not always achieve at similar levels in the work force and other competitive situations, the tendency being for females to receive lower appraisals for their performances than males. Studies dealing with the assessment of competence and gender differences have generally found that males are more successful than females (Sharp and Post, 1980), and that males are seen as more competent and evaluated more favorably than females (Deaux and Taynor, 1973; Etaugh and Sanders, 1974; Friend, Kalin, and Giles, 1979; Pheterson, Kiesler and Goldberg, 1971). A brief review of the research carried out on gender and causal attributions is presented here, along with some of the most common explanations given by the theory for the differences in assessment.

Gender is generally recognized as a social category. That is, people attach stereotyped assumptions to being male or female (Deaux, 1976; Bond, 1983). The stereotypes concern personality traits such as the perceived pre-disposition to perform in a specific manner (either socially desirable or undesirable) in a task situation. These affect perceptions of motivation, competence, and confidence of male and female performers. Stereotypes concerning males and females are a reflection of the status quo in a society in which males are more valued than females. When these are accepted by the attributor, he/she makes attributions for a performance outcome that effectively maintains this notion. This is done so that the individual may create and sustain a sense of stability and control, and in some cases cancel out any contradictory information. Differences in attributions for males' and females' performances are predicted to the extent that differences exist in the stereotypes.

The following is a review of studies on gender and attributions. The findings are classified according to gender differences concerning locus of causality, the self-serving bias, and differences in the level of expectancy. The sections are not exclusive and many of the points of interest overlap. Each section begins with the general assumptions, followed by results from selected studies.

### 1) Differences in locus of causality

Attribution theory proposes that males are internal in success and external in failure, while females are external in success and internal in failure.

In a study using sex-linked tasks and investigating success only, Deaux and Emswiller (1974) found that more internal attributions were made to the male performer by male and female subjects in the case of the male task. There were no noticeable differences regarding the female task. The Stephan and Woolridge study (1977) involving male and female subjects evaluating two females performing a male task (assembling a carburetor) found that male subjects made stronger internal attributions for the female who failed at the task than did female subjects. Wiley, Crittenden, and Birg (1979) found that female subjects made more attributions to uncontrollable factors than did male subjects. Sweeney, Moreland, and Gruber (1982) asked subjects to recall a past success or failure and to make attributions for that outcome. They found that although success was internalized by both sexes, failure was externalized more by males than by females. These studies show general support for the assumptions regarding gender differences in locus of causality.

### 2) Differences in the self-serving bias

It is proposed that males make more self-enhancing attributions (attributing success to internal factors and failure to external factors), whereas females make more self-derogatory attributions (attributing success to external factors and failure to internal factors). This results from individuals trying to maintain a set of socially desirable beliefs about themselves and others.

Nicholls (1975) found that girls showed a significant self-derogatory bias which was not evident for boys, and also found that boys showed a defensive bias in luck (attributing failure to bad luck) while girls did not. Post (1981) investigated attributions for successful and unsuccessful performance outcomes of males and females by subjects who held either traditional sex-role attitudes or more egalitarian attitudes concerning gender roles. Results showed that in the failure condition, lack of ability was attributed to females and lack of effort was attributed to males. Results from Taynor and Deaux (1973) are also relevant here. They studied male actors evaluating male and female performers defending themselves and a

non-acting partner of the opposite sex from a gunman. The findings suggest that there is a self-serving bias for males when evaluating other males' performances: attributions were made to effort and ability for the male performance, and to good luck for the female performance. It would seem that male subjects were trying to maintain the traditional concept of the "strong male".

The above three studies give support to the self-serving assumption. However, McHugh, Fisher, and Frieze (1982), focussing on self-serving biases, found no effects of gender on ability attributions, while Levine, Gillman, and Reis (1982), when comparing the importance of self-serving biases with other factors such as motivation, fear of success and attitudes towards women, found that self-serving biases were not significantly more important in making causal attributions.

### 3) Differences in the level of expectancy

It is also proposed that males have higher expectations for their own and other males' performance outcomes, and thus make attributions to stable factors rather than unstable factors. Females have lower expectations for their own and other females' outcomes, and tend to make attributions more to unstable than to stable factors.

Feather and Simon's results (1971) showed that expected outcomes were attributed to stable factors and unexpected outcomes were attributed to unstable factors. In this study, males were expected to succeed, and thus male success was attributed to ability. On the other hand, female success was attributed to effort and luck. Since females were expected to fail, their failure was attributed to stable factors, while male failure was attributed more to lack of effort and bad luck. These findings are in accordance with the expectancy assumption.

Although most of the examples in these three sections support the ideas presented in attribution theory, Frieze et al. (1982) found no significant differences pertaining to gender attributions in a review of twenty-one studies. Similarly, the reviews by Foschi and Plecash (1983), and Foschi (forthcoming) have only found moderate and weak support for the contention that gender differences exist in causal attributions. This, however, is not to say that gender is not a significant variable. Rather than questioning the significance of the variable, the studies and the reviews need to be scrutinized in more detail. For

example, among the studies carried out in this area, there is little consensus concerning the type of task, measurements for the dependent variables, and the focus of the research. Each study deals separately with different aspects of attribution, such as self-serving biases, achievement motivation, and self- vs. other-attributions. The research can be streamlined by introducing a reformulation of the attribution hypotheses which narrows down the focus of interest by i) introducing scope conditions, which specify the range of the theory, and ii) defining more theoretical propositions. In the case of a review, one that has no organizing principles may not reveal results where they exist. It is necessary, therefore, to specify areas of interest so that appropriate examples may be chosen. These points are addressed in the next chapter, where both status generalization and attribution theories are discussed in terms of their similarities, and a reformulation proposed by Foschi integrating aspects of the two theories is presented.

## CHAPTER II. STATUS GENERALIZATION THEORY AND REFORMULATION OF THE ATTRIBUTION HYPOTHESES

### A. Status Generalization Theory

"Expectation states theory" is a comprehensive research program which was originally formulated in the 1960's by Joseph Berger and associates (1966, 1972, 1974, 1977, 1980, 1985). It consists of a set of interrelated theories dealing with status organizing processes in informal, task-oriented groups. In this chapter, one of these theories, status generalization, is discussed.

Status generalization is the process by which external status characteristics that are significant in the larger society become the basis of differentiation within task-oriented groups. This differentiation affects expectations of performance held by group members for each other and the performance evaluations that are made within the group.

A key concept within the theory is that of a status characteristic. It is a feature or an attribute of an individual around which other members of the group organize cognitions, evaluations, and expectations. It consists of two or more states which are differentially evaluated in such a way that when one state is considered to be better than another, then that characteristic is defined as a status characteristic.

A status characteristic is relatively defined such that the value of one state is determined in relation to that of another state. Thus, if a characteristic has three states, x, y, and z, state y may be considered higher and therefore better than state z, but lower and thus worse than state x. Status characteristics are socially defined so that one that has two differentially evaluated states in one social system (society, group) may not be considered a discriminating characteristic in another. Furthermore, within a system that distinguishes between different states of a characteristic, that status characteristic has an effect on interaction only if activated.

Status characteristics vary in degrees of specificity. They can be specific, corresponding to expectations in precisely defined situations, or diffuse, relating to expectations in a wide range of situations.



An example of a specific status characteristic is perfect pitch, an ability which is applicable to limited situations in music. Status characteristics that are applicable to a larger number of situations are classified as diffuse. Each state of such a characteristic has a set of similarly evaluated states of related specific characteristics associated with it. Also, associated with each state is a similarly evaluated general expectation state. Thus, for example, when gender is considered a diffuse status characteristic in a given social system, then i) being male is regarded as being better than being female, ii) being male is associated with being more mechanical, dexterous, educated, and energetic than being female, and iii) being male is considered to be generally superior to being female (Berger et al., 1977).

Status generalization theory deals with the conditions under which status characteristics are activated, maintained, create performance expectations, and affect behavior in task-oriented situations. A characteristic is activated when it is used to form expectations. As mentioned earlier, status characteristics have an effect on interaction only in specified situations. These situations where status characteristics are activated, and to which status generalization theory applies, are defined in the scope conditions of the theory. The fundamental scope conditions are as follows:

- a) members of a group are differentiated on a single status characteristic,
- b) members perform a task which requires a single valued ability,
- c) the task involves a goal, and members are aware of what constitutes success and failure in achieving the goal,
- d) members value the task at hand and consider it important to do well at the task (task-orientation),
- e) members are prepared to take each other's opinions into account in order to achieve a joint correct solution to the task (collective-orientation).

These scope conditions have since been expanded to include situations involving more than one characteristic, and more than one task (Berger et al. 1977).

When a situation meets all of the scope conditions, the status characteristics are used to form expectations. In many cases, especially those involving a specific status characteristic, the relevance of having one or another state of the characteristic to completing the task successfully is evident. If the task is tuning a violin, and the states of the characteristic are having or not having perfect pitch, then having the ability is considered to be better for performing the task than not having it. It follows that an individual with the ability will be expected to complete the task more successfully than an individual without the

ability. When the relationship between a status characteristic and a task is obvious, a path of task relevance can be drawn which shows the cognitive connection between the performer and the task, linking the state of the status characteristic held by the individual to the performance outcome. If the status characteristic is directly relevant to the task, as in the above example, then the path of relevance is short and the relevancy of the characteristic to the task is strong. If the status characteristic is indirectly relevant to the task, as in the case of having the ability to play the piano and tuning a violin, the path is longer and the applicability of the characteristic to the task is not as strong.

A status characteristic may also become activated even when no path of relevance exists, and there is no obvious relationship between the characteristic and the task. This occurs when there is no other factor differentiating the members of a group. In this instance, the theory assumes that interactants will behave as if the characteristic were relevant to the task, provided the two are not explicitly dissociated from each other. This is known as the "burden of proof" process. This implies that unless the applicability of a status characteristic is challenged, status generalization will occur and task-specific performance expectations will be inferred regardless of the actual relevance of the characteristic to the task.

When members in a task-oriented group are differentiated by a status characteristic they consider to be relevant to the situation, performance expectations are formed within the group according to the states of the characteristic that each member possesses. The performance expectations define the power and prestige order of the group which can be observed in the interaction within the group. This order consists of action opportunities, performance output, communicated evaluations, and influence over group decisions. If higher expectations are held for one group member than for another, the former will be given more opportunities to contribute to the decision making, will make more contributions that will be evaluated more favorably by other members, and the person will have more influence on the group. Thus, for example, if an individual has the higher state of a diffuse status characteristic, higher expectations will be held for that person, and he/she will be more positively evaluated than an individual with the lower state of the characteristic.

As mentioned previously, the original scope conditions have been extended to include multiple status characteristics. The revised theory accommodates situations in which both specific and diffuse status characteristics that are not necessarily congruent with each other are found. Work on inconsistent status

information is especially relevant to this thesis since it is concerned with assessments of equal performance outcomes by higher and lower status individuals. Studies such as Hughes' (1945) involving a male patient confronted by a female physician are reviewed and discussed by Webster and Driskell (1978). These authors present evidence for the contention that a combining process operates in such instances to provide an aggregate expectation state. These, in turn, are used to organize the power and prestige of the group. Berger and Fisek (1970), in a study involving two specific characteristics, found that subjects who possessed the higher states of both were higher in the observable power and prestige order of the group than were those with only one higher state. The lowest in the power and prestige order were subjects who possessed the lower state of both characteristics. Also, studies carried out by Elizabeth Cohen and associates show that status differentiation based on a diffuse status characteristic may be lessened and/or overcome by the introduction of a second specific characteristic that is inconsistent with the first (Cohen, 1972; Cohen and Roper, 1972; Cohen and Sharan, 1980). Freese and Cohen (1973) present a theory of how status generalization may be eliminated in the presence of inconsistent status information, while Humphreys and Berger (1981) present a model of the process of how multiple statuses are combined. So far, the evidence supports an aggregate expectation state emerging from the combining process (Berger and Fisek, 1970; Sobieszek and Webster, 1973; Freese, 1974; Kervin, 1977). This argument is incorporated into the next section of this chapter.

A recent addition to the concept of the power and prestige order of the group is the variable of "performance standards". It was introduced to the theory by Foschi as a key variable in the formation of expectations (Foschi, Warriner, and Hart, 1985; Foschi and Foddy, forthcoming). Performance standards are defined as the rules that specify the performance outcomes required to make inferences to ability (or lack of ability) at a task. In other words, they dictate how well (or how poorly) an individual needs to perform in order to be credited with (or denied) ability.

These standards influence the manner in which ability inferences are made, and consequently, the strength of the resulting expectations. For example, in a task group comprised of two actors *p* and *o*, when *p* holds higher expectations for himself than for *o*, *p*'s expectation state is described as [+ -]. If *p* holds lower expectations, his expectation state is said to be [- +]. When *p* and *o* are performing a task, and both are aware of what outcome is needed to infer ability (or lack of ability) at the task, if *p*'s own performance meets the standard for ability, and *o*'s performance meets the standard for lack of ability, *p* is

said to hold strong [ + - ] expectations. On the other hand, if p's own performance does not match the standard for ability and o's does not meet the the standard for lack of ability, p is said to hold weak [ + - ] expectations. The same principles apply to strong and weak [ - + ] expectations. There are also instances where p's performance meets one standard (either for ability or for lack of ability) but o's does not, and vice versa. Foschi and Foddy (forthcoming) mention that a more elaborate set of definitions would include these intermediate cases. However, it is not discussed in detail, and little work has yet been done in the area.

In the presence of performance outcomes, the same outcome may be judged as due more or less to the competence of the performer depending on the standards that are applied, and expectations for future performances are formed according to whether more or less ability was correspondingly inferred. Standards are not always objective, and vary across individuals so that one may hold either stricter or more lenient standards than another.

There are also instances of double standards (Nieva and Gutek, 1981; Pugh and Wahrman, 1983). A double standard occurs when different standards are used by an individual to evaluate two different performers for the same outcome. This implies, for example, in the case of a task involving two individuals with identically successful performances, a stricter standard for inference of ability is applied to one than to the other. This makes it more difficult for the first to be given credit for the performance and for positive expectations to be formed. This concept can also be extended to multiple standards when more than two states of a diffuse status characteristic are involved. Standards play an essential role in the formation of expectations and the assignment of ability, and are discussed in more detail in the next section of this chapter.

Propositions from status generalization theory have been tested using a standardized experimental situation. This comprises of a group consisting of two performers, and a task which requires a single valued ability. The performers are differentiated by a single status characteristic, and the effect of the characteristic upon the power and prestige order of the group is observed in the resulting interaction. For example, a common measure is the amount of influence accepted by one person from the other when performing the task. The accumulated research, dealing with a wide range of status characteristics, provides supportive evidence for the propositions of the theory. Status characteristics that have been investigated

include age (Freese and Cohen, 1973), level of education (Moore, 1968), gender (Meeker and Weitzel-O'Neill, 1977), and ethnicity (Tuzlak and Moore, 1984). More specific characteristics such as reading ability have also been studied (Rosenholtz, 1985). Since this thesis concerns the effect of ethnicity, only studies in the expectation states literature dealing with this variable are reviewed next.

The first studies involving ethnicity and the power and prestige order of groups were carried out by Katz and associates prior to the formulation of status generalization theory. The work is thus outside the framework of the theory. However, these authors investigated the effect of ethnic differentiation on opportunities to communicate and the direction of those communications. Since this coincides with the interests of the theory, these studies are mentioned here.

Katz, Goldston, and Benjamin (1958) studied problem-solving groups consisting of two Black and two White subjects. The amount of communication made by each subject and the direction of the communication on various problem-solving tasks were measured. It was found that White subjects were more active and communicative than Black subjects. There was a tendency for White subjects to address one another more than the Black subjects, and Black subjects also addressed the White subjects more than one another. This indicated that White subjects had a superior role, and that there was a definite ordering of power and prestige within the groups.

This study was followed up by a similar one by Katz and Benjamin (1960) in which the Black and White subjects were more closely matched on intelligence. In the experiment, the subjects were measured on the amount of interaction initiated, influence exerted, and productivity. It was again found that White subjects were more active, communicative, and productive in the group than the Black subjects. Whites exerted more influence on the group while the Blacks showed compliance in the decision making process, and rated Whites as more competent.

Since the formulation of status generalization theory, much of the work on ethnicity has been done by Elizabeth Cohen and her associates in the area of expectation training and interventions in educational settings. The main focus of her work is on correcting the effects of status generalization. This involves investigating the presence and activation of a diffuse status characteristic, and then applying expectation training to reverse its effect. These studies not only ascertain whether ethnicity is a diffuse

status characteristic, but also show how status generalization theory can be applied to diminish the effect of those characteristics.

Expectation training involves the use of information that is inconsistent with the ascribed state of a status characteristic in order to overcome and eliminate discrimination. This is done by introducing a performance characteristic that produces positive expectations of competence for a lower status actor. In this way, the difference in expectations for competence for the higher status and the lower status individuals are reduced. In order to achieve this, Cohen and associates have devised a method where a lower state individual is trained at a new task, and after displaying competence at the task, teaches it to a higher status individual.

Using this method, Cohen and Roper (1972) studied the interactions between Black and White junior high school children from segregated backgrounds. The subjects were assigned to one of three conditions; i) the training was administered only to Black subjects so that only their expectations were altered, ii) the training was administered to both Black and White subjects so that both groups would have higher expectations for the Blacks, and iii) the training for the two ethnic groups was strengthened by a relevance bond. The results showed that in the first condition, both Black and White subjects had low expectations for Black, and relatively higher expectations for White subjects. However, when the expectations of both groups were altered, the resulting behavior indicated equal status interaction. From the results, it was concluded that expectations of both groups need to be modified for the training to be effective.

A similar study was carried out by Riordan and Ruggiero (1980) also investigating Black and White differences. The authors investigated the power and prestige order in three groups, an untreated group, a group in which only the Blacks' expectations were altered, and a group with both Blacks' and Whites' expectations treated by the training. The treated groups corresponded to the first two groups in the Cohen and Roper study. The results in this study showed that there was White dominance in the interaction observed in the untreated control groups, but equal status interaction was observed when expectations of only the Black subjects were altered, and Black dominance resulted from the treatment of both Black and White subjects. The differences in the results obtained in this and in the Cohen and Roper studies were credited to the extensive expectation training carried out in the later study.

Cook (1974) carried out a study involving expectation training with Native Indian and White children in British Columbia. She found that prior to the training, Native Indian children were less communicative and influential than their White counterparts, with White children having 27% more successful influence attempts than Native Indian children. After applying the expectation training, however, although Native Indian children were still less interactive than the Whites, they became significantly more assertive in behavior and influential within the work groups.

Cohen, Lockheed, and Lohman (1976) conducted a study at the Centre for Interracial Cooperation, that was designed to find out the extent to which equal status behavior endured over time. Subjects were Black and White children at the summer school, and all were treated with the training. The training was successful, resulting in equal status behavior amongst Black and White males, and reduced status differences between Black and White females. Over a period of six weeks, the subjects received instruction from a racially mixed team as a method of sustaining the effect of the training. It was found that as a result of the second part of the study, the effects were strengthened for both males and females.

Other studies investigating ethnicity as a diffuse status characteristic include Rosenholtz and Cohen (1985) in which status differences between Mexican-Americans and Anglo-Americans were observed. In this study, it was found that ethnic differences affected the power and prestige order of the task-oriented groups only when a visual cue was available.

Yuchtman-Yaar and Semyonov (1979) described the general dominance of Western Jews over Middle-Eastern Jews in the academic and business worlds, and predicted that if ethnicity was a status characteristic in Israel, it would act as a differentiating characteristic even in areas not connected with academic or financial achievement. These authors chose sports as one such area, and administered questionnaires to soccer players of both ethnic backgrounds on their aspirations. The findings revealed a connection between ethnicity and perceived competence at playing soccer since the "burden of proof" was on the Middle-Eastern Jews to prove their capabilities at the game. This study is unique to this field of research in that it is correlational.

Cohen and Sharan (1980) studied the same ethnic groups applying the experimental approach for the first time to a society outside North America to investigate the effect of ethnicity on the power and

prestige order of a problem-solving group. The study used expectation training, and the results showed that Western Jews made more contributions towards performing the task at hand, and were more influential in the decision making process than the Middle-Eastern Jews.

More recent work in this area has been done in Canada by Tuzlak and Moore (1984), and by Buchan (1986). Tuzlak and Moore investigated the effects of ethnicity (Black and White) and demeanor (confident and not confident). Subjects were White undergraduates in Toronto, and results indicated that working with a White or a Black partner activated ethnicity as a status characteristic. A main effect was found for ethnicity, but only a marginal one for demeanor, the effect of the latter diminishing over time. Buchan investigated ethnic differences between East Indians and White Anglo-Saxons using White undergraduates at U.B.C. as subjects. Following the standardized experimental procedure, results indicated that there were no significant differences in perceived competence and influence accepted from a partner of either ethnic origin. Buchan argues that this may have been due to the lack of visual cues, and also to the possibility that in the university setting, East Indians do not constitute a lower-status group.

The studies lend support to the assumption that ethnicity is a diffuse status characteristic as defined by the theory in a variety of social systems. However, no research has been carried out to date dealing with ethnicity and standards. This topic is of interest especially in light of the findings of studies investigating gender and standards (Foschi, Warriner, and Hart, 1985; Freeman, 1986), and the recently formulated propositions concerning gender, double standards, and attributions (Foschi and Plecash, 1983; Foschi, forthcoming). In the next section, these propositions are presented and applied to ethnicity.

## **B. Status Generalization and Attributions - A Reformulation**

As discussed in Chapter 1, there is evidence that gender has a differentiating effect on causal attributions for success and failure outcomes. Studies have shown that when performing the same task, there is a tendency for males to be attributed more ability and less luck in success than females. Failure, on the other hand, is attributed more to lack of ability and less to bad luck for females than for males. Foschi and Plecash (1983) and Foschi (forthcoming) have identified similarities between these findings in attribution theory and the work on gender and status generalization. Foschi suggests that in both instances,



gender acts as a discriminating characteristic which determines the perceived competence of the individual being evaluated. She proposes an integration of the two theories for gender and task performance outcomes using this perspective.

The converging point of interest of the two theories is that both are concerned with gender differences in the evaluation of competence or ability. Status generalization proposes that under certain conditions, gender differences affect perceived competence of individuals and this is reflected in the power and prestige order of the group. In situations where gender is activated as a status characteristic, if males constitute the higher status and females the lower status, then females are perceived to be the less competent. As a result, they receive less power and prestige than males. In studies using the attribution approach, a similar relationship between gender difference and assessment of performance outcomes has been observed. Males are assigned more socially desirable characteristics in the form of ability, while these are withheld from the female. Attribution theory, however, does not provide a situational approach and does not specify when such behavior can be observed. Also, the dispositional perspective that is the centrepoint of attributional reasoning has been identified as comparatively weak. Pugh and Wahrman (1983) review work on conformity and on self-confidence as two examples of dispositional explanations for gender differences. These authors report that neither, by themselves, provide evidence for the contention that they affect assessments of competence. The authors do not discard the possibility that dispositional factors may interact with situational factors to produce a given assessment. However, the point to be stressed here is that dispositional factors come into play only in certain situations. One objective of the integration is to provide a situational approach for understanding attribution studies dealing with gender.

The second common issue regards assessments of competence and ability. Status generalization theory investigates evaluations made for the performance of a task partner, who is either of superior or inferior status. This is done by observing how much influence the subject accepts from his/her partner. The evaluations entail deciding whether or not the partner's performance is good enough to be accepted. The decision concerning the quality of the performance is made by the subject, and there is no confirmation of this assessment. Inferences to competence are made by the amount of influence accepted. Attribution theory, on the other hand, measures assessments of competence for performances that have already been completed and objectively defined as either success or failure. Some work has been carried

out in status generalization dealing with actual performance outcomes (Pugh and Wahrman, 1983). Work in this context has investigated the effects of combining specific and diffuse status information on the power and prestige order of the group. Performance outcomes can be seen as reflecting possession of a specific status characteristic. When this is the case, gender and outcome information are merged according to the combining principle. The assessments of the outcomes are predicted to be consistent with the aggregate expectation state of the performer that is obtained from combining the states of the specific (performance outcome) and the diffuse (gender, ethnicity, etc.) characteristics. An example of this is when a male and a female are both equally successful at a task. The higher status of the male is reinforced by the outcome, while the lower status of the female is combined with the high state of the outcome condition. The status advantage for the male is thus reduced by the introduction of the outcome variable. However, as long as this advantage is not overcome, differences in assessments will persist. Thus, by applying this principle to studies on attributions, it is possible to reinterpret findings from these studies using a status generalization perspective. The second objective of the integration is to extend status generalization theory to include assessments of performance outcomes.

The reformulation is based on the central idea that attributions are better understood when considered in relative rather than in absolute terms. It is proposed that an individual's performance be assessed relative to the performance of others rather than by itself. Thus, when only information on gender and performance outcome of the performer are provided, differences observed in attributions made to equal performances by a male and a female are interpreted as an effect of an activated status characteristic. Gender differences in attributions can then be explained by the assignment of superior and inferior status, as opposed to pre-disposing characteristics ascribed to males and females. The main focus in this situation is not whether a performance is attributed to ability or to non-ability factors, but rather the extent to which each of these factors, in particular ability, are used when performances by more than two status differentiated individuals are considered. Therefore, for a successful performance outcome, the reformulation states whether more or less ability is attributed to one performer than to another. In failure, the extent to which ability is denied to one performer relative to the other is investigated.

There are two possible ways to obtain performances by two individuals, and to have these assessed. The first is to have an attributor, *p*, observing and assessing the performance outcomes of two performers, *o*<sub>1</sub> and *o*<sub>2</sub>. The other is to have *p* as a performer and attributor, assessing his/her own

performance in relation to that of an other, o. In the following explanation of the reformulation, examples refer to p assessing the performances of o1 and o2. The explanation is equally applicable to the cases in which p makes attributions for the performances of self and o.

The concept of standards plays a major role in the reformulation. When investigating assessments of actual performance outcomes, it is important to find out the standards for high and low ability that are implemented by attributors. Performance standards have been defined by Foschi and Foddy (forthcoming) in the following way:

Definition 1: Standards for ability are set according to

- a) the degree of difficulty of the task (e.g. difficult or easy),
- b) the proportion of correct responses achieved by the performer in one attempt at the task (e.g. 85% or 45%),
- c) the number of times the task needs to be repeated in order to infer ability (e.g. 10 times or 2 times),
- d) the number of additional tasks requiring the same ability in which the performer has to display competence as defined in a, b, and c above (e.g. 10 tasks or 2 tasks),
- e) the number of additional tasks requiring related abilities in which the performer has to display competence as defined in a, b, and c (e.g. 10 tasks or 2 tasks).

These requirements are combined to produce standards that vary in degrees of strictness, from very strict to very lenient. For example, if an attributor, p1, assessing o's performance defines standards for a moderately difficult task as 85% correct responses in one attempt which has to be repeated 10 times, and also requires similar performances at ten additional tasks using the same ability, and at ten additional tasks using related abilities, the standard for inferring ability is very strict. On the other hand, p2 assessing the same performance, who maintains standards based on 60% correct responses with no repetitions at the same or other tasks holds more lenient standards. Standards for lack of ability (low ability) are defined according to the same principle. An attributor, p1, who holds strict standards (i.e. easy to fail) may set the standard for inferring lack of ability at less than 50% correct responses at a moderately difficult task, repeated two times or more, with similar requirements for one or more tasks using the same ability, and one or more additional tasks using related abilities. An individual with more lenient standards (i.e. difficult

to fail) would lower the percentage of correct responses, and increase the number of additional tasks.

Keeping this in mind, the scope conditions for the reformulation are presented. Scope conditions set the range of applicability of a theory. The reformulation defines the relationship between status, the allocation of performance expectations, the application of standards, and attributions for performance outcomes.

Status differentiation between the two performers is a key concept in the reformulation. Since status generalization specifies that differences will be observed only if a diffuse status characteristic is activated, the following condition is required.

#### Scope Condition 1.

The performers are differentiated by a single diffuse status characteristic, and this characteristic is activated for p.

In order to observe the relationship between the variables, it is necessary to have a situation where performance outcomes by two status differentiated individuals can be compared and assessed. This involves the same task to be performed individually by two performers, o1(+) and o2(-), and for the two to have identical outcome scores. These in turn, are assessed by an attributor, p. Thus the following scope conditions are proposed:

#### Scope Condition 2.

A task is performed individually by at least two performers, o1 and o2.

#### Scope Condition 3.

There are objective criteria for the evaluation of the task performance and identical outcomes (either success or failure) are obtained by the two performers.

#### Scope Condition 4.

Attributor, p, assesses the comparative performance outcomes of o1 and o2 at the task.

Status generalization applies primarily to task-oriented situations. In previous work involving a subject, p, performing a task with an other, o, this has meant that p and o must value the task and be motivated to do well. An integration of attribution and status generalization theories involves situations in which a subject, p, makes attributions for the performance outcomes of two performers, o1 and o2. In order for the subjects to make meaningful assessments, it is necessary for them to value the task and be motivated to make correct assessments. Also, it is important that the subjects are aware that performers value the task and are motivated to do well at it. This can be expressed in two scope conditions.

#### Scope Condition 5.

Attributor, p, believes that the performers value the task and are motivated to do well.

#### Scope Condition 6.

In addition, p also values the task and is motivated to make correct assessments regarding the relative contribution of ability and other factors to the performances.

According to propositions from status generalization theory;

Assumption 1. In a task situation meeting all of the above conditions, when D is a diffuse status characteristic with states of x and y, and x is the higher state of the two, if performer o1 possesses the higher state of the characteristic than o2, o1 is assigned a higher level of perceived competence, and is therefore allocated higher expectations for the performance outcome than o2.

Returning to the concept of performance standards, in many situations, the standards held by individuals vary according to the information p has about the performers. For example, p may apply a

stricter standard for o2 than for o1. This is an instance of double standards. Foschi and Foddy (forthcoming) propose that double standards are applied when the information available to p concerning the performers triggers the activation of a status characteristic. An activated status characteristic changes the requirements that make up a standard. For example, if p holds lower performance expectations for o2 than for o1, the percentage of correct responses required for any one task may be raised for o2, and the number of additional tasks and abilities at which o2 has to show competence can be increased, making it more difficult for o2 to be assigned high ability. When higher performance expectations are held for one actor than for another, the former is treated with a more lenient standard for ability, and since this is easier to meet than a stricter standard, the former is assigned high ability more easily and more frequently than the other. This leads to the second assumption in the reformulation.

#### Assumption 2.

The extent to which a performance is expected affects the standards used to assess it, and the more expected the successful outcome the less strict the standards (for success) applied. Also, the more expected the unsuccessful outcome the more strict the standards (for failure) applied.

From the above two assumptions, the following propositions have been developed:

Proposition 1.a. When o1 and o2 achieve the same successful performance outcome, o1 is more likely to meet the standard for ability than o2, and thus o1's performance is more likely to be attributed to ability than o2's performance.

b. When o1 and o2 achieve the same successful performance outcome, o2 is more unlikely to meet the standard for ability than o1, and thus o2's performance is more likely to be attributed to non-ability factors than o1's performance.

Proposition 2.a. When o1 and o2 achieve the same unsuccessful performance outcome, o2 is more likely to meet the standard for lack of ability than o1, and thus o2's performance is more likely to be attributed to lack of ability than o1's performance.

b. When o1 and o2 achieve the same unsuccessful performance outcome, o1 is more likely not to meet the standard for lack of ability than o2, and thus o1's performance is more likely to be attributed to non-ability factors than o2's performance.

From the above, Foschi (forthcoming) derives more specific propositions concerning gender and attributions. Since males occupy the higher state of the status characteristic "gender":

- 1) When a male and a female are equally successful at the same task, a) the success of the male will tend to be attributed to ability more than the success of the female, while b) the success of the female will tend to be attributed to non-ability factors more than the success of the male.
- 2) When a male and a female are equally unsuccessful at the same task, a) the failure of the female will tend to be attributed to lack of ability more than the failure of the male, while b) the failure of the male will tend to be attributed to non-ability factors more than the failure of the female.

Support for these hypotheses has been varied. Foschi and Plecash (1983) reviewed 27 attribution studies investigating gender. Of those studies, all 27 tested Hypothesis 1a, 20 examined Hypothesis 1b, 13 tested Hypothesis 2a, and 11 looked at Hypothesis 2b. Results were classified as indicating support, moderate support, or no support for the hypotheses. Foschi and Plecash found 81% support for Hypothesis 1a, 90% support for Hypothesis 1b, 31% support for Hypothesis 2a, and 45% support for Hypothesis 2b. Most of the support was in the 'moderate support' category. Evidence from 30 cross-cultural studies also dealing with gender is reported by Foschi (forthcoming). In this review, there was 30% support for Hypothesis 1a, 40% support for Hypothesis 1b, and 25% support for Hypotheses 2a and 2b. These findings, however, should be qualified since the reviews included some studies that did not meet scope conditions. In order to obtain evidence for the hypotheses, it is important that the studies reviewed meet these conditions. In gathering evidence for ethnicity, this point is taken into account.

The reformulation refers to causal factors other than ability, such as luck, effort, and task difficulty. According to Foschi, success by females and failure by males are attributed to non-ability factors and therefore discounted, thereby maintaining the status quo in which men are defined as more competent than women. The idea of discrediting the unexpected performance (success by females, failure by males) is important in considering unequal assessments. However, several objections are raised for including these factors in the propositions.

First, the mutually exclusive nature of the various causal factors in the propositions is disputed. Ability, luck, effort, task difficulty, and other factors are not necessarily mutually exclusive in an additive formula. In other words, very high ability may be attributed to a successful performance. At the same time, depending on the situation, very high luck and effort may also be attributed. This situation can be illustrated by a local gymnastic meet. Both gymnasts and judges are task-oriented, and there is an objective criterion for scoring performances. When a gymnast is successful, he/she is accredited with high ability, but also much effort and luck is attributed to the performance. For an unsuccessful performance, attributions can be made to lack of ability (low ability), but at the same time, bad luck can be involved. Although a relationship may exist between the various causal factors, this has so far not been investigated. There is no information regarding such a relationship. It is therefore suggested that the reformulation deal only with the ability factor until further research is carried out.

Second, a theoretical argument is presented. The path of the reformulation is based on propositions from status generalization. This connects performance expectations, perceived competence, and attributions. It is argued that attributions to non-ability factors are not directly connected with performance expectations and perceived competence. Also, activated status differences lead to more or less perceived competence. It follows that in success, more or less ability will be inferred, as opposed to ability being inferred for o1 and not for o2. Thus, it is suggested that more or less ability will be attributed to one performer's outcome than to the other's. In this way, in success, more or less ability is attributed to the outcome, thereby not totally discounting the success of the female (or o2), but rather diminishing its effect on expectations for future performances. The same applies for failure by a male (or o1).

The third objection against incorporating non-ability factors in the reformulation is that several factors, such as 'effort' and 'task difficulty', may be considered as scope conditions. Task-orientation and valuing the task implies that performers should take the task seriously and to try and do well at it. Several attribution studies on gender have shown that male tasks but not female tasks, are valued by performers and attributors. This can be interpreted as "female tasks are easy and not worth taking seriously and trying hard at, but male tasks are important and difficult and need more effort". Attributions to effort and task difficulty become confounded with manipulation checks.



For these reasons, this thesis does not deal with non-ability factors, and they are not included in the hypotheses to be tested. Thus, the revised hypotheses are the following. When  $x$  and  $y$  constitute two states of a diffuse status characteristic  $D$ , and  $x$  occupies the higher state; if  $o1$  belongs to state  $x$  and  $o2$  belongs to state  $y$ :

- 1) when  $o1$  and  $o2$  are equally successful at the same task, the success of  $o1$  is attributed to ability more than the success of  $o2$ , and
- 2) when  $o1$  and  $o2$  are equally unsuccessful at the same task, the failure of  $o2$  is attributed to lack of ability more than the failure of  $o1$ .

In the next chapter, the revised hypotheses are tested for ethnicity. The method employed is similar to that used by Foschi for gender. Studies investigating effects of ethnicity on attributions to performance outcomes are reviewed and results pertaining to the hypotheses are presented in tables indicating support and no support. The findings and their consequences for the revised reformulation are then discussed.

### CHAPTER III. ASSESSMENT OF THE REFORMULATION REGARDING ETHNICITY

#### A. Guidelines for the Selection of Articles

In this chapter, the reformulated hypotheses are applied to ethnicity as an example of a diffuse status characteristic. There are two reasons for doing this: first, to investigate the applicability of the hypotheses to characteristics other than gender, and second, to suggest refinements to the reformulation. The hypotheses for ethnicity are the following.

In a task-oriented situation in which ethnicity is an activated diffuse status characteristic for the attributor; when A and B are two different ethnic groups, and A constitutes the higher state of the characteristic: if "a" is a member of A and "b" is a member of B, then

- 1) when a and b are equally successful at the same task, the success of a is attributed to ability more than the success of b,
- 2) when a and b are equally unsuccessful at the same task, the failure of b is attributed to lack of ability more than the failure of a.

The hypotheses are tested through a secondary analysis of experimental data. The data are collected from studies that have been identified as investigating the effects of ethnicity on attributions for success and failure. The search for the studies included only published work in English from the periodical literature. Care was taken to include as many studies as possible, relying on Psychological Abstracts, Sociological Abstracts, and a computer-assisted search using "ethnicity", "success", "failure", "causal attributions", and "ability" as the key words in two types of combinations, one including all the factors together, and the second combining "ethnicity" with each of the others. However, no claim is made to the exhaustiveness of the list as it is possible that relevant studies may have been overlooked. Also, it is not known what percentage of the actual studies in the area have been published. It may be that only a small percentage of the work in the area has appeared in print due to non-significant results and/or editorial biases. Therefore, it is noted that the intention of this thesis is not to produce an exhaustive review, but rather to use those studies that have been identified to illustrate and interpret the process under study.

Much of the work on ethnicity and attributions has been carried out in the United States, investigating evaluations of performances by Black and White performers. The assumption behind these studies is that White performers are perceived to be generally more competent than their Black counterparts, and are seen as more internal in favorable situations and external in unfavorable situations. Black performers are considered to be the opposite. Recently, U.S. studies involving Chicanos (Powers and Wagner, 1983), and Native Indians (Powers and Rossman; 1984) have appeared, and others have been reported from such ethnically heterogeneous societies as New Zealand (Nicholls, 1978), Nigeria (Boski, 1983), and South Africa (Orpen, 1980; Louw and Louw-Potgieter, 1986).

The studies discussed in this chapter were selected using the following criteria. Only those investigating ethnicity were included in the list. Studies such as Kashima and Triandis (1986) and Chandler et al. (1981) were not included as they investigated nationality. Kashima and Triandis studied differences in attributions made by American and Japanese students in the United States. Chandler et al. looked at attributions made by university students in four different countries. Also, studies in which the measures of ability and effort were combined in the results were not included as the ethnicity by ability interaction cannot be observed (Boski, 1983; Forgas, Morris, and Furnham, 1982; Piche et al., 1977).

The reviews of the studies are divided into two categories: those investigating other-attributions, and those dealing with self-attributions. The former are reviewed in Appendix A, the latter, in Appendix B. Although self-attribution studies do not meet scope condition 4, a review of them is provided. These studies provide only indirect evidence, but are included for the sake of a thorough review. Since self-attribution studies do not meet some of the scope conditions, significantly weaker support is expected from these than from other-attribution studies.

By following the procedures mentioned above, a total of seventeen studies have been identified. They are summarized in the form of tables in the two appendices. The tables have been constructed to include information regarding a) the type of subjects used in the study, b) the design of the experiment and the direction of the attributions, c) the task that the subjects performed and the manipulation of the outcome variable, and d) the degree of support for the reformulated hypotheses. This last factor is divided into two categories; no support, and support. The direction of attributions refers to whose performance is being assessed, and is expressed in terms of cases as in Foschi (forthcoming). In all, five cases are examined in

this thesis.

Let us first consider other-attributions. There are two possibilities: subjects may act as performers and attributors, and compare and evaluate their own performance outcomes with those of others; or they may simply be attributors, evaluating the comparative performances of two or more performers. The two are expressed as Case 1 and Case 2. These in turn are divided into two sections to accommodate the ethnicity of the subject/attributor. In a) the subject/attributor possesses the higher value of a status characteristic, in b), the lower value.

#### Case 1.

- a)  $p(\text{self})+$  evaluates own performance and the performance of  $\alpha(\text{other})-$ ,
- b)  $p(\text{self})-$  evaluates own performance and the performance of  $\alpha(\text{other})+$ ,

#### Case 2.

- a)  $p(\text{self})+$  evaluates performances by  $\alpha(\text{other})1+$  and  $\alpha(\text{other})2-$ ,
- b)  $p(\text{self})-$  evaluates performances by  $\alpha(\text{other})1+$  and  $\alpha(\text{other})2-$ .

Of the two cases, Case 2 is the more preferable since  $p$  is not involved in the performance. Whereas the evaluations made by  $p$  in Case 1 may be affected by the outcome of his/her own performance and be influenced by self-serving biases, evaluations made by  $p$  in Case 2 are less likely to be affected by these biases.

Studies investigating other-attributions may also use designs in which there are two relatively homogeneous subject groups evaluating separate actors. This is expressed in the following way.

#### Case 3

- a)  $p(\text{self})1+$  evaluates own performance and  $p(\text{self})2+$  evaluates  $\alpha(\text{other})-$ ,
- b)  $p(\text{self})1-$  evaluates own performance and  $p(\text{self})2-$  evaluates  $\alpha(\text{other})+$ .

A variation of Case 3 is when members of one of the subject groups makes attributions to a status equal other's performance outcome while members of the other subject group make attributions to a lower status other's performance outcome.

#### Case 4

- a)  $p(\text{self})_{1+}$  evaluates  $\alpha(\text{other})_{1+}$  and  $p(\text{self})_{2+}$  evaluates  $\alpha(\text{other})_{2-}$ ,
- b)  $p(\text{self})_{1-}$  evaluates  $\alpha(\text{other})_{1+}$  and  $p(\text{self})_{2-}$  evaluates  $\alpha(\text{other})_{2-}$ .

Cases 3 and 4 do not have  $p$  making comparative evaluations of performance outcomes by two status differentiated performers. However, Foschi (forthcoming) suggests that if the two subject groups are homogeneous, it is possible to compare the separate assessments made by the two. In this way, relative attributions for the outcomes of members of the ethnic groups may be obtained. Thus, although these cases are not as directly relevant to the hypotheses as Cases 1 and 2, they are included in the review.

In self-attribution studies, subjects make attributions only for their own outcomes. Thus, an additional case is needed. In order to have ethnic differences in self-attribution, at least two ethnically different subject groups are required.

Case 5  $p(\text{self})_{1+}$  evaluates own performance and  $p(\text{self})_{2-}$  evaluates own performance.

Next, a general summary of studies reviewed in Appendices A and B is presented. This is followed by a discussion of the results of the studies in relation to the hypotheses. The amount of support for the hypotheses and suggested refinements are discussed in the final section of this chapter.

### **B. General Summary of the Studies Reviewed**

This section presents an overview of the studies, specifically examining the subject population, the type of performance task, manipulation of the outcome variable, the direction of attributions, and measurement of the ability factor. This is to assess the similarities and differences between the studies, and also to determine to what extent the studies meet the scope conditions.

a) Eight studies were identified for Appendix A. Six of these were carried out in the U.S., with ethnic dimensions of Black and White. A study investigating Maori (ethnic Polynesian) and Pakeha (White) differences in New Zealand, and another looking at Black and White differences in South Africa are also included. In all of them, a White ethnic group constitutes the higher status group. There is an overrepresentation of studies from the U.S.. This is not surprising given that much of the pioneering work on attributions came from the U.S.. Since the reformulation is concerned with ethnically heterogeneous societies in which levels of ethnicity are differentially evaluated, the number of U.S. studies does not pose a theoretical problem. However, it narrows the ways in which ethnicity has been operationalized in this review.

The subjects range from grade school children in Nicholls (1978), to managers holding middle management positions in Orpen (1980). Only four studies use university undergraduates as subjects. Thus, there is a more diverse representation of the general population than is often the case in social psychological research. Four of the studies have subjects as attributors only (all are Case 2), assessing the outcomes of two or more performers. Among them, Nicholls includes the ethnicity of the attributor in the design. In this study, both Maori and Pakeha subjects assessed outcomes by performers of the two ethnic groups. The remaining four are examples of Case 4. Subjects are attributors randomly assigned to either of two performers, and they are not required to compare outcomes. Again, one study investigates ethnicity of attributor: in Whitehead, Smith, and Eichhorn (1982), both Black and White subjects assessed the successful or unsuccessful performance outcomes of a Black or a White male. In cases where the ethnicity of the subject is an additional experimental condition, if ethnicity is activated for the attributor, it is assumed that the values attached to its different states are the same regardless of the attributor's ethnic background. Thus, the same attributions are predicted for both subject groups.

As for the type of tasks used in the studies, most involved naturally occurring or created events such as school exam scores, and work performance records. Two studies used specifically created tasks (an ESP test, and a verbal analogy test). In most cases, it is likely that the subjects valued the task because of the nature of the settings. In the study involving the ESP test, they were informed of the importance of the task. Manipulation of the success and failure conditions was based either on objective measurements in the form of scores (Nicholls, 1978; Stephan and Beane, 1978; Greenberg and Rosenfield, 1979; Hall et al., 1986), or obvious indications of a very good or a very poor performance (Friend and Wood, 1973; Orpen,

1980; Whitehead, Smith, and Eichhorn, 1982; Yarkin, Town, and Wallston, 1982). The latter involved informing the subjects that performers had done better (worse) than others, were top (bottom) of the class, or had good (poor) career accomplishments.

b) Nine studies were identified for Appendix B. These are more diverse in terms of the ethnic groups investigated. Six studies were carried out in the U.S.: two involved Black and White differences, one focussed on Native Indians and Whites in remedial reading classes, another used Black, Hispanic, and White ethnic groups, and two investigated Hispanic and White differences. One study from Israel with European-American and Asian-African subjects, a Canadian study involving East Indians and Anglo-Saxon children, and a study done in South Africa with East Indian, White, and Black students were also included. The subjects ranged from 8 to 10 year olds in Fry and Ghosh (1980), to university students in Mednick (1981) and Louw and Louw-Potgieter (1986).

The type of task and manipulation of outcome are different from those discussed earlier. Several studies used tasks that required some skill such as the reading task in Friend and Neale (1972) and the two tasks used by Fry and Ghosh. All three of these were objectively graded by administrators of the studies, and the outcomes were reported to the subjects in comparison with others' outcomes. Subjects were told that they had done much better or worse than others who had tried the test. Two studies used actual test outcomes (Louw and Louw-Potgieter, 1986; Raviv et al., 1980). In these studies the subjects were asked to determine whether the outcome obtained was a success or a failure. When the variable is subjectively defined, the same outcome may be deemed a success by one subject and a failure by another, depending on the standards applied. Thus, this procedure significantly reduces the validity of the results regarding the outcome variable. The remaining studies had no task, and instead administered questionnaires regarding attributions of either hypothetical or past successes and failures. A similar problem arises here regarding the validity of the results.

Considering the studies in the two appendices together, they use two ways of assessing the hypotheses: by measuring attributions to ability using i) graded scales, and ii) yes and no responses. The scales used varied widely, from Hall et al.'s 5-point scale to Stephan and Beane's scale of -7 to +7. The scales were graded so that they measured the importance of ability for the outcome from 'not important' to 'very important'. In studies using questionnaires, subjects were simply required to answer 'yes' or 'no' to such questions as "I

succeeded because I have ability". This measurement does not facilitate relative analysis of ability attributions to two or more ethnic groups. For these cases, the authors looked at the percentage of yes and no responses for each ethnic group, reported from the other and the relative percentages of both. Due to the diversity of the measurements, and also due to the fact that some studies do not present raw data, it is difficult to lay down an objective criterion for different degrees of support for the hypotheses. This is the reason why the results are classified simply as either supportive or non-supportive. However, within a given study, when additional variables show a differential effect on the strength of support for the hypotheses, these are discussed separately.

From the eight studies in Appendix A, fifteen separate conditions have been further identified. In Appendix B, eleven such conditions were found. They are the result of independent variables other than ethnicity, such as social class, gender, and type of task, that have interacted with ethnicity to produce more than one set of results. For example, Greenberg and Rosenfield (1979) found that high ethnocentric subjects and low ethnocentric subjects did not make the same attributions for equal outcomes by Black and White performers. One subject group provided support for the hypotheses while the other did not. It is important to note the magnitude and the effect of ethnicity under different circumstances. Thus, when another variable affects results, it is reported as an additional experimental condition in the appendices as well as in the tables below.

The results obtained for Hypothesis 1 are presented in Tables 1 and 2. Results for Hypothesis 2 are shown in Tables 3 and 4. Tables 1 and 3 are constructed from studies in Appendix A, and Tables 2 and 4 are from studies in Appendix B. In all the tables, studies supporting the hypotheses are listed in the "support" column, and those not supporting the hypotheses are listed in the "no support" column. The studies are listed by author(s) and date of publication. When an additional experimental variable has affected results, its different values are shown in brackets below the listing. Variables such as gender that are included in many of the studies are not mentioned unless they have affected the evidence for the hypotheses. If the results from one value of such a variable shows support while another does not, the study is listed in both columns, qualified by the information in brackets. In the case of greater support for one value than for another, this information is also provided in brackets. In the ensuing sections on the analysis of the tables, each listing is counted separately for calculating percentage for support/no support. Thus, a single study may be considered twice.



### C. Analysis and Assessment

- a) Hypothesis 1 – When two ethnically differentiated performers are equally successful at a task, the outcome of the higher status performer is attributed to higher ability than the outcome of the lower status performer.

Table 1. Evidence for Hypothesis 1 from Other-Attribution Studies

Support*	No Support
Friend and Wood (1973) (for middle-class more than for lower-class subjects)	
Greenberg and Rosenfield (1979) (for high ethnocentric subjects)	Greenberg and Rosenfield (1979) (for low ethnocentric subjects)
Hall, Howe, Merkel, and Lederman (1986)	
Nicholls (1978)	
Orpen (1980)	
Stephan and Beane (1978) (for subjects not matched on similarity)	Stephan and Beane (1978) (for subjects matched on similarity)
Whitehead, Smith, and Eichhorn (1982) (for athletic performance)	Whitehead, Smith, and Eichhorn (1982) (for academic performance)
Yarkin, Town, and Wallston (1982) (for males)	Yarkin, Town, and Wallston (1982) (for females)

\*Percentage for support = 67%

Table 1 shows the evidence accumulated for Hypothesis 1 from other-attribution studies reviewed in Appendix A. Eight studies have been identified in this category. Among the eight, five studies showed that an additional variable was affecting results concerning the hypothesis. Friend and Wood (1973) found that attributions to ability differed for middle-class and lower-class performers. In the case of Greenberg and Rosenfield (1979), the level of ethnocentricity of the subjects affected attributions. Stephan and Beane (1978) found that information equating or differentiating subjects and performers affected the results, and in Whitehead, Smith, and Eichhorn (1982), attributions made for performances at an athletic task differed from those made for performances at an academic task. Finally, Yarkin, Town, and Wallston (1982) reported separate results for male and female performers. In sum, of twelve experimental conditions, eight indicate support and four no support. The four experimental conditions in the no-support category are discussed first.

In the Greenberg and Rosenfield study (1979), subjects were differentiated on level of ethnocentricity. Subjects who scored high on the ethnocentrism test provided results supporting the hypothesis. Low ethnocentric subjects, on the other hand, attributed more ability to the Black as opposed to the White performer. It is important to point out that since low ethnocentric subjects do not, by definition, discriminate along ethnic lines, ethnicity is not activated as a diffuse status characteristic for them. Thus, this group of subjects do not meet scope condition 1.

In the Stephan and Beane study (1978), some subjects were matched with their partners on personality, attitudes, and values, while others were assigned partners who were their opposites on these traits. The fact that those with partners similar to themselves do not support Hypothesis 1 suggests that ethnicity is not a strong, differentiating variable when information equating the subjects and performers in other respects is provided.

Whitehead, Smith, and Eichhorn (1982) used two different tasks, academic and athletic, and found that the hypothesis was only supported in the athletic condition. A possible explanation may lie in the type of subjects who participated in the study. The subjects were high school students reading about an 18-year-old who was either top of the class, or top member on the football team. The subjects may have valued athletics and being on the football team more than doing well at schoolwork. Scope conditions 5 and 6 of the reformulation specify that the task must be valued by the performers and attributors. In this

study, these two scope conditions may not have been met for the academic task.

The fourth study in the no-support category by Yarkin, Town, and Wallston (1982) involved gender as a second independent variable. The results indicated that the hypothesis was upheld for male performers but not for female performers. In fact, success by a White male was attributed more to ability than the same outcome by any of the other three groups (Black males, White females, and Black females). Attributions to ability for these three groups did not differ significantly. This suggests that if a performer is inferior on one or more status characteristics, he/she is treated in a similar inferior manner.

Three of the experimental conditions not supporting the hypothesis do not meet one or another of the scope conditions laid down in the previous chapter. Either ethnicity is not activated, or the task is not valued. Since scope conditions define the boundaries of the propositions, results from studies that do not meet them are considered beyond those boundaries. As such, the propositions do not apply, and the results are not explained by the theory. In Yarkin, Town, and Wallston both ethnicity and gender were activated for the subjects, so that there was a second basis for evaluation. Ethnicity was not activated for the female performers because they already possessed the inferior state of gender.

Turning now to the nine conditions that support Hypothesis 1, only Friend and Wood (1973) involving social class as a second independent variable provided different degrees of support. The results indicated that attributions differed more on the ethnicity variable when performers were of middle- than lower-class background. Perhaps ethnicity is more important when performers are from middle-class backgrounds.

Table 2. Evidence for Hypothesis 1 from Self-Attribution Studies

Support*	No Support
Duda (1985) (for athletic performance)	Duda (1985) (for academic performance)
Fry and Ghosh (1980)	Friend and Neale (1972)
	Louw and Louw-Potgieter (1986)
	Mednick (1981)
	Powers and Rossman (1984)
	Powers and Wagner (1983)
	Raviv, Bar-Tal, Raviv, and Bar-Tal (1980)
Willig, Harnisch, Hill, and Maehr (1983) (for Hispanic subjects more than for Black subjects)	

\*Percentage of support = 30%

Table 2 presents evidence for the hypothesis from self-attribution studies reviewed in Appendix B. Nine studies have been identified for this category. The evidence for the hypothesis from two of the studies are further qualified by an additional independent variable. The results in Duda (1985) are differentiated for the type of task, and Willig et al. (1983) found that the degree of support for the hypothesis varied for Black and Hispanic subjects. Since each of these conditions are considered separately, there are eleven listings all together. Three show support, and eight provide no support. The non-supportive studies are again discussed first.

Raviv et al. (1980) found that members of the disadvantaged Asian-African group attributed more ability to their own success than did members of the advantaged European-American group. Friend and Neale (1972) found that Black and White subjects did not make different attributions for success, and this was also the case in Mednick (1981). Powers and Rossman (1984) did not find differences between Native Indians and Caucasians, and Powers and Wagner (1983) between Anglos and Hispanics. Duda (1985) found that subjects made attributions contrary to the hypothesis for the academic condition. Subjects in Louw and Louw-Porgieter (1986) did not use ability to explain their performance outcomes. The subjects in this study were all university students. It may be the case that in South Africa, being in university implies having ability, so that performance outcomes are perceived to be due to non-ability factors such as mood.

In general, it seems that in these studies, ethnicity is not a major factor in the perception of causes of own performance outcomes. This is to be expected since it is difficult to activate ethnicity in the absence of a comparative reference point. Since these studies do not meet some of the scope conditions of the reformulated hypothesis, an adequate explanation using propositions in the reformulation cannot be provided for the studies indicating either support or no-support.

- b) Hypothesis 2 – When two ethnically differentiated performers are equally unsuccessful at a task, the outcome of the lower status performer is attributed to lack of ability more than the outcome of the higher status performer.

Table 3. Evidence for Hypothesis 2 from Other-Attribution Studies

Support*	No Support
Greenberg and Rosenfield (1979) (for high ethnocentric subjects)	Greenberg and Rosenfield (1979) (for low ethnocentric subjects)
Orpen (1980)	
Stephan and Beane (1978) (for subjects not matched on similarity more than for subjects matched on similarity)	
Whitehead, Smith, and Eichhorn (1982) (for White subjects)	Whitehead, Smith, and Eichhorn (1982) (for Black subjects)

\*Percentage of support = 67%

Table 3 presents evidence for Hypothesis 2 from other-attribution studies reviewed in Appendix A. There are fewer conditions illustrating evidence for the failure condition as compared with those available for success. Four studies have been identified for this table. Of these, the results pertinent to the hypothesis from Greenberg and Rosenfield (1979), Stephan and Beane (1978), and Whitehead, Smith, and Wallston (1982) were differentiated by an additional variable. Six failure conditions are therefore listed.

Two conditions showed no support for the hypothesis. Greenberg and Rosenfield found support with high-ethnocentric subjects but not with low-ethnocentric subjects. These findings are consistent with the results obtained in the success condition, indicating again that ethnicity constitutes a diffuse status characteristic for high- but not for low-ethnocentric individuals. On the other hand, the results for the failure condition in the Whitehead, Smith, and Wallston study (1982) do not coincide with those from the success condition. The results here differ for the ethnicity of subject and not for the type of task. It would seem that in the case of failure, ethnicity is activated for White subjects but not Black subjects.

Among the conditions that support the hypothesis, Stephan and Beane (1978) found that although both conditions indicated support, when subjects were matched with their partners on similarity, attributions to lack of ability were lower than when subjects and their partners were not similar. This is consistent with the results obtained from the success condition. From this study, one can speculate that ethnicity is a more poignant variable when differences in other respects are reinforced.

Table 4. Evidence for Hypothesis 2 from Self-Attribution Studies

Support*	No Support
Duda (1985) (for athletic performance)	Duda (1985) (for academic performance) Friend and Neale (1972) Fry and Ghosh (1980) Louw and Louw-Potgieter (1986) Mednick (1981) Powers and Rossman (1984)
Powers and Wagner (1983) Raviv, Bar-Tal, Raviv, and Bar-Tal (1980)	Willig, Harnisch, Hill, and Maehr (1983) (for Hispanic subjects more than for Black subjects)

\*Percentage of support = 30%



Finally, Table 4 lists conditions from self-attribution studies for the failure hypothesis. The list consists of nine studies. Two of these are qualified by additional variables for evidence concerning the hypothesis. Duda (1985) reported support in the athletic condition, but not for the academic condition. Also, Willig et al. (1983) found differences in the degree of no support for Hispanic and Black subjects. Thus, there are ten listings in this table.

On the whole, most of the conditions reveal no support for the hypothesis. Three experimental conditions show support for the hypothesis while seven do not. Of the seven studies in the no support column, five do not show any differences on the ability factor for the ethnic groups investigated. This is similar to the findings in the success condition. Due to the non-comparative nature of the studies in this table, the findings are difficult to analyse. The results indicate that when subjects of different ethnic backgrounds make attributions to their own outcomes, there is little or no difference in the assessments. Even when a difference is observed, this effect cannot necessarily be credited to the ethnicity variable. Since subjects do not have an opportunity to assess their performances in relation to those of other individuals from a different ethnic group, it cannot be claimed that ethnicity has been activated as a status characteristic. The results may be explained by cultural or personality differences rather than by status differences per se.

#### **D. Reformulation Reconsidered**

Table 1 indicates 67% support (8 experimental conditions) and 33% no support (4 experimental conditions) for Hypothesis 1 while Table 2 shows 30% support (3 experimental conditions) and 70% no support (7 experimental conditions). There is 67% support and 33% no support for Hypothesis 2 from Table 3, and 30% support and 70% no support from Table 4. The propositions of the reformulation are strongly supported by other-attribution studies, but not by self-attribution studies. This is in accordance with predictions made earlier in this chapter.

As mentioned before, a key concept of the reformulation is the relative aspect of attributions. This is expressed in scope condition 4. Since self-attribution studies do not fulfill this requirement, they are more difficult to explain in relation to the propositions of the reformulation. The low percentage of

support is consistent with the view that these studies are not directly relevant to the propositions. At the same time, the results emphasize the importance of scope conditions.

The accumulation and analysis of experimental data on ethnicity and attributions to success and failure have contributed to the improvement of the reformulation in the following way. First, the inclusion of ethnicity as a status differentiating variable diversifies the operationalization of the variable. Also, since ethnicity is a multi-value variable as opposed to gender, which is dichotomous, the range of the status variable has been extended to include two or more individuals of different statuses performing the same task. Diversifying the variable in this manner strengthens the validity of the propositions. It remains to be seen whether or not other diffuse status characteristics can be incorporated.

Second, this chapter has provided a direct comparison of other-attribution and self-attribution studies. The results indicate stronger support for the hypotheses from other-attribution studies than from self-attribution studies. It is speculated that the difference in the amount of support is in large part due to the requirements specified by scope condition 4. In other words, other-attribution studies provide the opportunity for subjects to activate the status characteristic by giving information concerning a comparative reference point. On the other hand, self-attribution studies do not, and it is probable that the status variable was not activated for the subjects in these studies. This shows the importance of specifying the range of applicability of the propositions by using scope conditions.

Finally, this chapter has investigated only the amount of attributions made to ability, and thereby narrowed the focus of investigation concerning the effects of ethnicity on attributions. The findings indicate that the hypotheses are supported for this variable. Further research may investigate other attribution factors (e.g. luck) to find out whether a similar pattern will emerge for them.

The next chapter proposes a standardized form for investigating status differentiation and attributions. It was mentioned at the beginning of this chapter that ethnicity and attributions to success and failure has not been systematically studied. It is proposed that a standardized experiment, such as the one used in status generalization (Berger et al., 1977), would make possible comparative analysis of results from different studies.

#### CHAPTER IV. DESIGN FOR AN EXPERIMENT ON ETHNICITY, STANDARDS, AND ATTRIBUTIONS TO ABILITY

So far, this thesis has presented the basic premises of attribution theory and status generalization theory. As well, it has discussed aspects of the two theories that are concerned with the effects on performance evaluations of such status characteristics as gender and ethnicity. The reformulation outlined in the second chapter is an integration of these aspects. From it, two hypotheses pertaining to ethnicity were proposed. The hypotheses were tested by analyzing studies on the effect of ethnicity on attributions for success and failure. The findings from this examination provide substantial support for the hypotheses, and consequently, the reformulation. In this chapter, an experimental design for the hypotheses is presented.

Previous work on the reformulation has assessed the validity of the propositions by gathering data from relevant empirical studies. This method involves observing the applicability of the propositions to the various empirical findings. However, the propositions have not yet been directly tested. Therefore, the next stage involves designing an experiment dealing specifically with the propositions and the process outlined in the reformulation.

In order to do this, a standardized experimental format is proposed. This can be used for different studies that investigate similar hypotheses. Such a standard experimental design has organized research in status generalization (Webster and Sobiezek, 1974; Berger et al., 1977) and has been instrumental in its growth. Experimental research in status generalization has been standardized for the purposes of obtaining cumulative knowledge. Berger et al. (1977) maintain that the primary objective of any type of scientific research, including experiments in social psychology, is to build on and add to previously acquired knowledge. Thus, the importance of individual studies lies in their relationship to other studies in the same research area. By designing experiments based on the same format, it is possible to compare results from different studies.

Berger et al. also stress the importance of comparability of methods used in experiments. This can be attained by regulating the manipulation of independent variables, scope conditions, and measures for the dependent variables. When there is little or no consistency in the methods employed, generalization

of results becomes problematic. A case in point is the manipulation of the success/failure outcome variable in attribution studies. The manipulation varies in several ways. There are studies that ask subjects to determine an outcome as a success or a failure (Louw and Louw-Potgieter, 1986; Raviv et al., 1980). In these studies, the definition of success and failure is left to the individuals' discretion and is not controlled. This may result in different criteria being used to determine success and failure: one score that is deemed a success by one individual may be defined as a failure by another who holds stricter standards. Other studies define 5 or more out of 10 a success, and less than 5 out of 10 a failure. Here, there is little difference between a person who succeeds with 6/10, and another who fails with 4/10. In such cases, the problem lies in the strength of the manipulation. If the manipulation is strong, the subjects are made aware that an outcome is either a success or a failure. Also, they are more likely to accept the outcome. A weak manipulation would not convince subjects that an outcome was either a success or a failure. It is difficult to collectively assess the results obtained from these studies, and to arrive at a definite conclusions.

The standard experimental format is outlined next, followed by a design of an experiment for ethnicity. The methodological tools for the experiment are given in Appendices C to F. They consist of instructions to the subjects, sample pages from booklets (describing the performers and their task outcomes, samples of the tasks, questionnaires, and manipulation checks), and instructions for debriefing.

#### **A. Overview of Experiment and Predictions**

According to the reformulation, differences in attributions are found because the status variable affects performance expectations, which in turn affect standards used to assess a performance outcome. An experimental design which tests this process requires: a status characteristic and objectively defined success and failure outcomes as the independent variables, performance expectations and standards for inferring amount of ability as the intervening variables, and ability attributions as the dependent variable. Measuring performance expectations also acts as a manipulation check for the status variable. If no differences in expectations are found for the status differentiated performers, either the characteristic is not a status characteristic for the attributor, or it has not been activated. The experimental format outlined in this chapter is designed to investigate attributions made by a subject for the performances of two performers who are differentiated on a diffuse status characteristic (Case 2). It is noted that the format can also be

used to investigate Cases 1, 3 and 4.

The factors that should be controlled by the experimenter are the following: manipulation of the status and the outcome variables, a standard setting for the experiment, a standard type of task, common measures for expectations, standards, and attributions, and manipulation checks. These are individually discussed below.

#### a) Manipulation of the Independent Variables

##### i) The Status Variable

First, it is necessary to activate subjects' beliefs about the status of the performers. This is done by providing information about the performers that differentiates them on only those characteristic that are being studied. When this manipulation is successful, any effect that is observed can be credited to the subjects' beliefs about that characteristic.

To make this manipulation possible, all information provided to the subjects is strictly controlled by the experimenter. Since subjects are making attributions for performances by other individuals, information regarding the performers can best be controlled by creating hypothetical performers using several background variables. For example, subjects can be given information about the performers' age, gender, ethnicity, educational background, place of birth, and so forth, that have been compiled by the experimenter. This would be sufficient since there is no need for the subjects to meet the performers. Information concerning the performers who are being studied must be kept constant across all information factors except for the status variable. Thus, if the effect of gender is being investigated, in both outcome conditions, the male and the female performer should be equal for age, educational background, course standing, and any other information factors that are given. The status characteristic of the performers may be introduced to the subjects by one of the following methods: the experimenter's instructions, descriptions in vignette form, visual cues, or a combination of the three. The information should be in an easily recognized form and reinforced if possible. In the case of ethnicity, it can be introduced by ethnic names, information regarding country of origin, languages spoken, colour photographs, and video films. Each subject is given information about both the high and the low status performers so that he/she can make comparative assessments of performance.

## ii) Success/Failure Conditions

This variable is to be manipulated so that the strength of the success condition is the same for all successful performers, and the strength of the failure condition is the same for all unsuccessful performers. This is best achieved by assigning identical scores to the two performers in each of the outcome conditions. An effective way of attaining this is by manipulating scores on a task. The scores can be arranged so that successful performers are given scores that are much higher than the average, and unsuccessful performers are given scores that are much lower than the average attained by others said to have taken the test. Subjects can also be informed that the average score is around 60%. This indicates that the performers did much better or much worse on the task. This comparative evaluation of results, while providing evidence of success or failure, eliminates giving subjects a set of standards for absolute success and failure (eg. above 80% for success and below 50% for failure). The manipulation should be strong, but not so strong that the effect of the outcome variable overpowers the effect of the status characteristic. This type of situation also offers the subjects greater flexibility to form their own subjective standards for ability (lack of ability) for each performer.

## b) Experimental Setting

There is always a possibility of subjects becoming suspicious in an experimental situation. This can be reduced by recruiting subjects who have never participated in a study before, and keeping them unaware of the real objective of the study. Suspicion can lead to invalid results. For example, if the subjects realize the true objective of the study, they may try to respond to questions and make attributions in a socially desirable manner, rather than according to their beliefs. Another possible source of error is the experimenter. For example, the characteristics of the experimenter (such as age and gender) may lead the subjects to attribute ability to them, and to make the same attributions in the study. Also, since the experimenter knows the hypotheses being tested, he/she may inadvertently give subtle cues that contribute to the subject confirming them. The experimenter, the instructions and their delivery should be kept constant for all sessions. This experiment is designed so that a group of subjects is run in a single session. This reduces the number of sessions that have to be carried out, and also the time required to complete a study. In this case, the composition of the group becomes important in avoiding suspicion. It is suggested that the group be as similar to the composition of the everyday environment of the subjects as possible in

terms of ethnicity, gender, and age. Thus, if subjects are White male undergraduates, the group should still include females and non-Whites as confederates.

#### c) A Standard Type of Task

Ambiguous, binary-choice decision-making tasks such as those used in status generalization studies can be used. The tasks are such that the probability of making a correct choice is about the same as chance, and can be described to the subjects as requiring important new abilities (ie. having important consequences for various real-life objectives of the subjects). It should also be mentioned that evidence thus far shows the tasks to be uncorrelated with any known skills (e.g. artistic ability, mathematical ability). This is done so that subjects have no prior beliefs about the tasks, and what is observed in the attributions is the operation of the expectation states formed by manipulations of the independent variables. The importance of the tasks should be stressed in order to attain task-orientation by the subjects. In this experimental format, subjects do not have to perform the tasks themselves, and need only be provided with examples of them and the scores obtained by each performer.

#### d) Measurement of Expectations, Standards, and Attributions

After providing information about the performers, and manipulating the status variable, the expectations for future performances and the standards used to evaluate performers are measured. This can be done by administering questionnaires. The questions regarding the intervening variables are camouflaged among other questions to avoid suspicion. When these have been completed, the outcome variable is manipulated by introducing the test scores. Ability attributions for the performance outcomes are then also measured using questionnaires. A scale of 0% to 100% can be used in order to measure all three of the variables. In the case of expectations, 0% indicates very low expectations and 100% indicates very high expectations. For standards, the scale can be used to indicate scores out of 100%. Subjects are asked to decide above what score they would consider the performer has ability (standard for ability), and below what score they would consider that he/she did not have ability (standard for lack of ability). Standards are measured twice, before and after the scores have been administered. The second set of standards can be used as manipulation checks for the first set and for the attributions, while testing the hypotheses at the same time. For attributions to ability, if these are equal to 0%, the performer is perceived

as having no ability, while 100% on the ability scale indicates that the performer is perceived as definitely having ability.

#### e) Manipulation Checks

Manipulation checks are an important part of the study since it is necessary to find out if the manipulations were successful, and also whether or not the subjects were suspicious. The checks can be administered at the end of the experiment, before the debriefing session. Manipulation checks are necessary for the status variable, the outcome variable, and task-orientation. Also checks are necessary for suspicion. Since the experiment is run in group sessions, it is most feasible to carry out the checks in questionnaire form.

The checks for the status variable may be done in several ways. For example, subjects can be asked to recall information, or to identify characteristics of each of the performers. Subjects may also be asked questions to find out if they noticed any particular characteristic that differentiated performers. In order to be sure that the status variable was noticed by the subjects, several questions both open-ended and multiple-choice should be asked.

Manipulation checks for the outcome variable can be carried out by asking subjects what score they would consider a success and a failure for the specific task. This can be double checked by providing scores and asking the subjects to rate them as low, below average, average, above average, or high.

Task-orientation is an important scope condition of the reformulation. This can be checked by asking subjects whether or not they were interested in the study, were involved and tried to do the best, and also whether or not they found it boring. It is a good idea to ask several questions concerning this condition to ensure a valid measure. Again, they can be a combination of open-ended and multiple-choice questions.

Checking for suspicion is more difficult. However, it is possible by tapping subjects' impressions of the study, such as whether or not they considered it a worthwhile endeavour, and what they thought about its purpose. Having done that, before debriefing the subjects, the experimenter can tell them that the



real objective of the study was not what they were told at the beginning of the session. The subjects can then guess the true purpose of the experiment. If a subject shows suspicion in the questions, and then correctly guesses the true purpose of the study, the data from that subject cannot be used. However, if a subject is dubious of the study, but does not guess the nature of the study, the data can be kept. Also, if the subject first indicates belief in the experimenter's explanation of the study, but correctly guesses the true purpose of the study when asked to do so, these data may also be kept.

#### f) Debriefing

At the end of the study, subjects must be debriefed thoroughly concerning its true purpose. A mass debriefing is proposed instead of the conventional personal interview. The debriefing can consist of a written pamphlet handed out to each subject explaining the purpose of the study, why deception was necessary, and indicating that the data will be looked at collectively and not individually. This is followed by any questions that the subjects may have, and if necessary, individual interviews with those subjects who request more information regarding the study and/or their own responses. The procedures followed in this proposal are covered by the University of British Columbia's certificate of approval B87-296 to Professor M. Foschi for social psychological experiments on standards and status in task groups.

#### g) Predictions

The experimental design investigates the effect of a diffuse status characteristic on performance expectations and standards, and the combined effect of the status variable and performance outcomes on standards and ability attributions. When X and Y constitute two differentially evaluated states of a diffuse status characteristic, and X is the higher state, if x possesses state X and y possesses state Y, then it is predicted that higher performance expectations will be held for x than for y. Thus, a stricter standard for having ability will be applied to y than to x in success. In failure, a higher standard for lack of ability will be applied to y than to x, making it easier for y to be denied ability. It is further predicted that when x and y are equally successful at a task, the success of x will be attributed to ability more than the success of y. Also, when x and y are equally unsuccessful at a task, the failure of y will be attributed to lower ability than the failure of x. These predictions are shown in Table 5. In the table, performance expectations are expressed in percentages. Standards for ability in success are expressed by the percentage of correct

responses necessary to infer ability, while standards for lack of ability in failure are expressed by the percentage of incorrect responses necessary to infer lack of ability. For the attributions, 0 indicates no ability while 100 indicates perfect ability.

Table 5. Overview of the Experiment

Condition	Ethnicity of Performer	Performance Expectations	Standards for ability	Attributions to ability
Success	X	a	c	e
	Y	b	d	f
			Standards for lack of ability	Attributions to lack of ability
Failure	X	g	i	k
	Y	h	j	l
Predictions				
		$a > b$	$d > c$	$e > f$
		$g > h$	$i > j$	$k > l$

#### B. Procedures for an Experiment on Ethnicity

This is a within-subjects design, in which each subject receives all four treatments. The experiment described here is similar to the one carried out by Orpen (1980). It involves a group of subjects in each session. The experimental conditions are i) successful high status performer, ii) successful low status performer, iii) unsuccessful high status performer, and iv) unsuccessful low status performer. The ethnicity variable should be selected in such a way that one of the two ethnic groups investigated is commonly accepted in that particular society to be high in status, and the other, low in status. For example, in Vancouver, the high status group can be White Anglo-Saxons, and the low status group may be East Indians (Buchan, 1986). The outcome variable is manipulated so that performers in the success condition

obtain a score of 78 out of 100 on a task, while those in the failure condition obtain 47 out of 100. Other performers get scores around the average, which is said to be 60%. The subjects are attributors only.

Subjects are recruited from first-year, 100-level courses. Recruitment forms ask for name, age, educational background, and courses taken. Using this information, 18 and 19 year-old males with Anglo-Saxon names can be selected. The age of the subject is important since older individuals tend not to accept experimental situations as well as younger subjects. Also, this factor should be kept relatively constant so that age does not become an extraneous variable. Individuals should be dismissed if they have taken courses on experimental social psychology since this may increase suspicion.

Subjects are run in groups of fifteen. Of the fifteen, ten are subjects and the remaining five are confederates making up a relative representation of the subjects' everyday social environment. The confederates may be females, males, individuals of different ethnic backgrounds and/or different ages. The total sum of subjects to be tested is 100.

At first, they are given a set of instructions by the experimenter regarding the purpose and content of the study. The experimenter should be the same for all sessions to avoid experimenter bias. The instructions and their delivery should also be kept constant for all sessions so that consistency is maintained.

In the instructions, subjects are informed that the study is for a new student program that is to be implemented at the institution. The program is still in the initial stages, and committee members evaluating the program are looking for some input from the student population about the program and the process of choosing successful candidates. Each subject is asked to assess fifteen anonymous applicants. The applicants constitute the performers in this study. Subjects read demographic and background information of the applicants. The demographic information contains applicants' place of birth, age, gender, educational background, language abilities, marital status, and place of residence. Ethnicity is manipulated by information regarding place of birth and language abilities. The background information refers to the academic standing of the applicants. Of the fifteen applicants, two are members of ethnic group X and two are members of ethnic group Y. The four are the same with respect to gender, age, and the other information factors. The other applicants are fillers to avoid suspicion. These can be varied on any of the

demographic factors. After reading about each applicant, the subjects answer questions concerning expected future academic performance, and standards with which to assess that performance. The question regarding the subjects' expectations for the performers acts as a manipulation check for ethnicity. The questions regarding standards ask the subjects to imagine that they were the applicant. A similar method was used by Friend and Wood (1973). They asked subjects how children made attributions to their own performance outcomes, and found an effect for ethnicity. It is assumed that people are seen as reflecting the double standards they expect will be applied to themselves relative to others. This method of measuring standards reduces the possibility that subjects will apply the same standards for all performers. The second section of the study involves performance outcome information. Subjects are informed that the program intends to use a newly developed test in evaluating applicants. They are told that the test has important implications for the program, since it has been proven to be effective in determining people's inherent capacities for improvement. Subjects are shown examples of the test. Some of these appear in Appendix E. A test score is provided for each of the applicants, and subjects make attributions for these outcomes to ability and other factors. The scores are manipulated so that one member of each ethnic group succeeds at the test, while the remaining two fail. To end the study subjects are asked their impressions of the program. They are also given an opportunity to make suggestions. Manipulation checks are included in the second set of questions.

Before leaving, the subjects are debriefed as a group about the real purpose of the study, and thanked for their participation.

## CONCLUSIONS

The purpose of this thesis has been to provide a theoretical explanation for ethnic inequalities in achievement evaluations. The explanation presented here is based on Foschi's reformulation combining aspects of attribution and status generalization theories. It is a situational approach that includes specifying the scope conditions under which the propositions apply. This thesis has shown that such an approach is a useful one for the topic under study.

The contributions of this thesis can be divided into two sections, theoretical and methodological. On the theoretical level, this work investigated the effects of ethnicity and success/failure outcomes on causal attributions. This extended the applicability of the propositions to status characteristics other than gender. This has strengthened the validity of the reformulation, and shown that the propositions are generalizable to situations involving other status characteristics.

Also, this thesis underlines the importance of Scope Condition 4. Previous work on the reformulation had included self-attribution studies in their reviews, and consequently had found inconsistent support for the propositions. In this thesis, results from self-attribution studies were reported separately from those investigating other-attributions. The former are not directly related to the propositions because they fall outside their range of applicability. Thus they should not be included in reviews concerned with the reformulation as they confound the amount of support for the reformulation. The finding that the propositions receive more support from other-attribution studies than self-attribution studies reinforces the importance of having scope conditions to specify the range of applicability of hypotheses.

The final theoretical contribution involves excluding non-ability factors as dependent variables. The path of the reformulation deals with the effect of a status variable and an outcome variable on perceived competence, and on attributions for success and failure outcomes. Non-ability factors cannot be incorporated into the theoretical framework unless a relationship between them and perceived competence is established. So far, this has not been done, and a brief look at the studies reviewed in this thesis reveals no regular pattern for the effect of ethnicity on attributions to non-ability factors. More research in this

area is suggested.

At the methodological level, the experimental design provides the tools for testing the propositions. So far, only findings from attribution studies have been used to validate the hypotheses. Since these do not investigate the two intervening variables, perceived competence and standards, no examination of the validity of the process of making attributions outlined in the reformulation has yet been carried out. An experiment investigating all of these factors will show the strength of the reformulation in providing an explanation for the problem under investigation.

The next step involves experimental testing of the propositions. The experiments will contribute to the accumulation of data regarding the propositions. At the same time, they can also contribute to the improvement of the reformulation by locating theoretical and methodological weaknesses. Also, the propositions can be extended to other status characteristics, and thereby strengthen the generalizability of the reformulation.

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**Appendix A. Reviews of Studies on Ethnicity and Causal Attributions – Cases 1–4**

*a) Subjects, b) Design of Study/ Direction of Attributions, c) Procedure, d) Results*

Friend, R. M., and L. E. Wood (1973)

- a) White college students in the U.S. enrolled in an introductory psychology course. Approximately equal number of males and females, aged between 17 and 21. N=46
  - b) 2 (ethnicity) x 2 (social class) x 2 (outcome). Case 2a.
  - c) Subjects were given descriptions of eight 10-year-old children and their performances at a reading test. They were asked to rate the importance they thought the children placed on ability, effort, task difficulty, and luck, in explaining their own performances.
  - d) Support for Hypothesis 1. Results for Hypothesis 2 not given. For Hypothesis 1, there was more support for actors of middle- than lower-class background.
- 

Greenberg, J., and D. Rosenfield (1979)

- a) White males in an introductory psychology course in the U.S.. They were either high or low in ethnocentrism (as measured by authors). N=49
  - b) 2 (ethnicity of performer) x 2 (level of ethnocentricity) x 2 (outcome). Case 2a.
  - c) Task involved subjects viewing tapes of four male performers working on an ESP test. Subjects made attributions for the performances to ESP ability, concentration, luck, and ease of task on a scale of 0 (no effect) to 11 (great effect). There were four different tapes all together, depicting one Black and one White succeeding, and one Black and one White failing. The order of tapes was randomized.
  - d) Support for both Hypotheses 1 and 2 in the case of high ethnocentric subjects. No support for Hypotheses 1 and 2 in the case of low ethnocentric subjects.
-

Hall, V.C., A. Howe, S. Merkel, and N. Lederman (1986)

- a) White teachers from five different desegregated junior high schools in the U.S.. Four were male and one female. N=5
  - b) 2 (ethnicity of performer) x 2 (sex of performer). Success only. Case 2a.
  - c) Teachers assessed the performances of four Black girls, four Black boys, four White girls, and four White boys in their respective schools. The children were randomly selected and teachers were provided with scores from maths and reading subtests as well as the final grades for a science course that they had taught. Each teacher was asked to rate their students on effort, ability, level of difficulty of the class for each student, and the degree to which the home environment affects the students' school performance. A 5-point scale was used.
  - d) Support for Hypothesis 1. Hypothesis 2 not tested.
- 

Nicholls, J. G. (1978)

- a) Maori and Pakeha children in New Zealand. N=288
  - b) 2 (ethnicity of subject) x 2 (ethnicity of performer) x 2 (outcome). Cases 2a and 2b.
  - c) Subjects saw two films of a Maori and a Pakeha child of the same age and sex as themselves working on arithmetic problems. In one film, the Maori displayed high effort, and the Pakeha low effort. In the other, the Maori displayed low effort and the Pakeha high effort. The performers obtained either high or low scores. The subjects were asked to attribute the performances to ability, effort, or luck. A counterbalanced sequence of films was used for each cell.
  - d) Support for Hypothesis 1 for subjects of both ethnic groups. Support for Hypothesis 2 unknown since there is no discussion of effect of ethnicity on the failure condition.
-

Orpen C. (1980)

- a) White male managers holding middle management positions in a South African commercial firm.  
Average age = 32.4 years. N=136
  - b) 2 (ethnicity of performer) x 2 (outcome). Case 2a.
  - c) Task was to evaluate thirty subordinate managers on ability, luck, hard work (effort), and task difficulty. Subjects were given "in baskets" of the subordinate managers describing performance on quality and quantity of output, turnover and absenteeism in the sector, grievances from subordinates, and cost and budget effectiveness. Two evaluatees (one White, one Black) were made out to be "identically poor", and two (one White, one Black) were made out to be "identically good". After each "in basket", subjects indicated the causal factors responsible for the success or failure of the evaluatee. A scale of 1 (not important) to 9 (very important) was used.
  - d) Support for both Hypotheses 1 and 2.
- 

Stephan, W.G., and W.E. Beane (1978)

- a) Anglo male undergraduates at a university in South Western U.S., participating as partial requirement for introductory psychology. N=101
- b) 2 (ethnicity of performer) x 2 (similarity between subject and performer) x 2 (outcome). Case 4a.
- c) Subjects saw a videotape of an Anglo or Chicano actor working on 30 verbal analogy problems. The actor was also either similar or dissimilar to the subject regarding personality, attitudes, and values. The subject was told that 15 correct responses out of 30 was the average outcome. In the success condition, the performer's score was 22 out of 30, while in the failure condition, the performer's score was 7 out of 30. The subjects made attributions for the performances to skill, effort, luck, and task difficulty using a 15-point scale, from -7 (hindered greatly) to +7 (helped greatly). Also, the perceived competence of the actor was measured on a 7-point Semantic Differential scale.
- d) Support for Hypothesis 1 in the case of subjects not matched on similarity with the performer. No support for Hypothesis 1 for subjects matched with their partner on similarity. Support for Hypothesis 2 for both subject groups, more so for the dissimilar than the similar group.

Whitehead, G.I., S.H. Smith, and J.A. Eichhorn (1982)

- a) White and Black male junior and senior high school students in the U.S.. N=364 (208 White, 156 Black).
  - b) 2 (ethnicity of subject) x 2 (ethnicity of performer) x 2 (academic/athletic performance) x 2 (outcome). Cases 4a and 4b.
  - c) Task was to read randomly distributed experimental booklets about an 18-year old male, either Black or White, successful or unsuccessful, in an academic or an athletic condition. In the academic condition, success was depicted in terms of being at the top of the class, and failure in terms of being at the bottom of the class. In the athletic condition, success was shown as being the top member of the football team, and failure as being the bottom member of the team. Attributions for the performances were made to ability, effort, task difficulty, and luck on a scale of 1 to 7.
  - d) Support for Hypothesis 1 for both subject groups in the athletic condition, but not for the academic condition. Support for Hypothesis 2 in both athletic and academic conditions for White subjects. No support for Black subjects in either of these conditions.
- 

Yarkin, K.L., Town, J.P., Wallston, B.S. (1982)

- a) Undergraduates at Vanderbilt University, U.S., fulfilling course requirements. Ethnicity of subjects not identified. N=120 (60 males, 60 females)
  - b) 2 (sex of performer) x 2 (race of performer) x 2 (sex of subject). Success only. Case 2a.
  - c) Each subject was randomly assigned to a description of a highly successful 27-year-old banking officer, who was either male or female, Black or White. A brief summary of personal background was provided along with a letter requesting job promotion. Subjects rated the stimulus person's career accomplishments on ability, motivation, task difficulty, and luck, using scales between 0 (not at all important) to 9 (extremely important).
  - d) Support for Hypothesis 1 in the case of male but not female performers. Hypothesis 2 not tested
-

## Appendix B. Reviews of Studies on Ethnicity and Causal Attributions - Case 5

### *a) Subjects, b) Design of Study/ Direction of Attributions, c) Procedure, d) Results*

Duda, J.L. (1985)

- a) Eleventh- and twelfth-grade Anglo and Mexican-American students from a high school in northwest New Mexico, U.S.. N=181 (121 Anglos, 60 Mexican-Americans)
  - b) 2 (ethnicity of subject) x 2 (outcome). Case 5.
  - c) Subjects were administered questionnaires tapping their definitions of success and failure, and achievement orientations in the classroom and in sports.
  - d) Support for Hypotheses 1 and 2 in the case of the athletic condition. No support for the academic condition.
- 

Friend, R.M., and J.M. Neale (1972)

- a) Fifth-grade children from three schools in an ethnically and socially heterogeneous area in the U.S.. Half the subjects were male and half were female. The subjects were divided into four groups; middle-class White, middle-class Black, lower-class White, and lower-class Black. N=125
  - b) 2 (ethnicity of subject) x 2 (social class) x 3 (outcome). Case 5.
  - c) The children completed a short reading test and were randomly assigned to one of three outcome conditions; success, failure, no feedback. They were told that they had done much better/worse than the other children or given no feedback. They were then asked to explain their own performance by making attributions to ability, effort, luck, and task difficulty.
  - d) No support for either Hypothesis 1 or 2 for both social class categories.
-

Fry, P.S., and R. Ghosh (1980)

- a) Asian Indian and White Anglo-Saxon children in Calgary, Canada, between the ages of 8 and 10.  
N=60 (30 Asian-Indian, 30 Anglo-Saxon)
  - b) 2 (ethnicity of subject) x 2 (outcome). Case 5.
  - c) Subjects completed the French Test of Insight and the Grid Exercise, and were told that they had attained 50 out of 60 (success condition), or 10 out of 60 (failure condition). Assignment to the outcome condition was randomized. Subjects were asked to indicate the importance of ability, effort, luck, and task difficulty, to their performances, using a 5-point scale.
  - d) Support for Hypothesis 1. No support for Hypothesis 2.
- 

Louw, J., and J. Louw-Potgieter (1986)

- a) Subjects were from Psychology 1 courses at three South African universities: 616 mostly Indian students from the University of Durban-Westville, 408 White students from the University of Natal, and 216 Black students from the University of Transkei. N=1240
  - b) 3 (ethnicity of subject) x 2 (outcome). Case 5.
  - c) Subjects received marks for a Psychology 1 test and were asked to evaluate it as either a success or a failure. They were then administered a questionnaire consisting of open-ended questions regarding the causes for the outcome, and questions referring to nineteen attribution factors.
  - d) No support for Hypothesis 1 or 2.
-

Mednick, M.T.S. (1981)

- a) White and Black women from major universities in Eastern U.S.. They were all upper division students who were selected on occupational goals (innovators, traditionals). There were 91 Black and 61 White innovators, and 65 Black and 42 White traditionals. N=259
  - b) 2 (ethnicity of subject) x 2 (occupational goals) x 2 (outcome). Case 5.
  - c) Questionnaires were administered to the subjects regarding the causes of their own successes and failures in academic work.
  - d) No support for either Hypothesis 1 or 2 for both innovator and traditional groups.
- 

Powers, S., and M.H. Rossman (1984)

- a) American Indian and Caucasian community college students in remedial reading classes in the U.S.. N=211 (112 American Indians, 99 Caucasians)
  - b) 2 (ethnicity of subject) x 2 (outcome). Case 5.
  - c) The Multidimensional–Multiattributibunal Causality Scale was administered to the students in the classroom. The scale has eight 3–item subscales to measure attributions of success (or failure) to ability (lack of ability), effort (lack of effort), and luck (bad luck).
  - d) No support for either Hypothesis 1 or 2.
-



Powers, S., and M.J. Wagner (1983)

- a) Hispanic and Anglo high school students in the U.S.. N=151 (64 Hispanics, 87 Anglos)
  - b) 2 (ethnicity of subject) x 2 (outcome). Case 5.
  - c) Subjects were administered the Multidimensional–Multiattributinal Causality Scale, and attributions for success and failure to ability, effort, context, and luck were investigated.
  - d) No Support for Hypothesis 1. Support for Hypothesis 2.
- 

Raviv, A., R.D. Bar-Tal, A. Raviv, and Y. Bar-Tal (1980)

- a) Sixth–grade students in Israel from three different backgrounds: the advantaged group consisting of European–Americans, the integrated group who were ethnically mixed, and the disadvantaged group consisting of Asian–Africans. N=134 (51 European–Americans, 27 Asian–Africans)
  - b) 3 (ethnicity of subject) x 2 (outcome). Case 5.
  - c) Students received actual scores on a maths test and were asked to evaluate it as a successful or unsuccessful outcome. They were then administered a questionnaire tapping their attributions to ability, interest, task difficulty, effort, preparation, luck, and teacher influence. A 7–point scale was used.
  - d) No support for Hypothesis 1. Support for Hypothesis 2. (The integrated group made intermediate attributions.)
-

Willig, A.C., D.L. Harnisch, K.T. Hill, and M.L. Maehr (1983)

- a) Anglo-American, Hispanic, and Black fourth to eighth graders in the greater metropolitan area of Chicago, U.S.. N=397 (111 Anglos, 187 Hispanics, 97 Blacks)
  - b) 3 (ethnicity of subject) x 2 (outcome). Case 5.
  - c) Questionnaires were administered to the students regarding test anxiety, defensiveness, and attributions for past performance outcomes. Attributions were made to ability, effort, luck, and task difficulty.
  - d) Support for Hypothesis 1 (with results more pronounced for Hispanic than for Black subjects). No support for Hypothesis 2.
-

### Appendix C. Instructions to the Subjects

As the subjects arrive, they are seated at tables by the EXPERIMENTER. Booklet 1 and Booklet 2, containing vignettes and questionnaires, are already on the tables.

"Hello, my name is EXPERIMENTER, and I am a research associate in the Department of Sociology. Today, I am here on behalf of the New Programs Committee. First, I would like to thank you all for coming here. I think that this will be interesting and enjoyable, as well as a rewarding experience. The study is straightforward, and your participation will be kept confidential."

"The purpose of this study is to obtain students' impressions and evaluations of a new program at this university. The program is called "Young Research", and trials are currently being carried out in several departments. It is open to all third- and fourth-year undergraduates who are interested in gaining some experience in research. It involves partial coverage of tuition fees for one school year, and the opportunity to work with pay for a member of faculty. This work may involve research only, research leading to a publishable work, teaching sessions in a class, or a combination of the three."

"The benefits of such a program are quite evident. It gives the student a concrete idea of what constitutes academic investigation, and at the same time provides the person with skills that are useful both academically and professionally."

"The committee members feel that it is an important program, and in order to improve it further, have requested this study in order to obtain student input. In this study, participants read about fifteen anonymous applicants from this year's trials. The study is concerned with determining what personal qualities of applicants are important, and also what measures and procedures are necessary for the evaluation of applicants."

"The procedure for evaluation used in this study is identical to that used by the committee for this year's applicants. The study is in two sections. In the first part, you are given information pertaining to the applicants. The applicants are kept anonymous, but you will read about their background, age, level of education, and their grades for the first two years of higher education. You are each given a different selection of applicants so that the study takes all the applicants into account. After reading about each applicant, there will be questions concerning your impressions of them."

"The second part involves information regarding how well each applicant did on a test. Recent research has shown that a relatively new test provides insight into the general capabilities of a person. The test investigates an ability called "situational capacity", and involves tasks such as contrast sensitivity, formative sensibility, decision making, and reflexive thinking. From what is known so far, situational capacity is a very important ability. For instance, it is now included in most North American aptitude tests. It has been found that the average score on the test in Canada and the U.S. is around 60%. However, there is no known relationship between it and such factors as age, education, gender, or any specialized skills such as mathematical or artistic ability. The absence of a relationship between situational capacity and these other qualities and abilities is an important find and of great interest to social scientists and management alike. It has also been found that life experiences and patterns of socialization may be correlated with situational capacity and this is of particular interest. Over the last two years, collaborative work between U.B.C. and Stanford University has found that situational capacity ability is relevant to social, organizational, and creative behavior. For this reason, it has been implemented in the application procedure of the program. Samples of the test and the scores obtained by the applicants are given in the second section of this study. After the scores for each applicant, there will be another set of questions about your impressions of the applicant and the procedures."

"Remember that for both sets of questions, this is a study asking for your impressions, so you should be trying your hardest to make accurate assessments. It is important that you are truthful about your impressions since only then will your input be helpful to the committee and the program."

"Are there any questions?"

"O.K. I will review the procedure."

"First, you will be given background information about each applicant. After this, some questions about the person will be posed. This is followed by an example of the tasks that were used, and the scores obtained on the test by each of the applicants. Finally, you will answer questions on the applicants, the program, and the the selection procedure."

"I would like to point out that we are interested in your own opinions. Therefore, please do not talk or discuss with others during the study."

"Please open the envelopes in front of you. There are two booklets inside. Take out only Booklet 1. Please read the instructions carefully before you start."

Subjects work on Booklet 1. EXPERIMENTER stays in the room. After 30 minutes, EXPERIMENTER checks to see if everyone has finished.

"Please put up your hand if you are still working on Booklet 1. When you have finished, close the booklet, and I will come and collect them."

EXPERIMENTER collects Booklet 1 from all the subjects.

"Next, you will go on to the second part of the study. In Booklet 2, you will find examples of the situational capacity test. Please look at them carefully, and then go on to the evaluations of the applicants

and the program. You may now start working on Booklet 2."

Subjects work on Booklet 2. EXPERIMENTER stays in the room. After 45 minutes, EXPERIMENTER checks to see if everyone has finished.

"Please put up your hand if you are still working on Booklet 2. When you have finished, close the booklet."

"Now you have reached the last part of the study. First, I would like to discuss the nature of this study with you. This study was in fact not designed to evaluate the "Young Research" program or the process of choosing successful applicants for the program. Before I go into the details of the study, I would like you all to try and guess its real purpose. There is space on the back of Booklet 2. Please write your ideas about the real objectives of this study."

After 5 minutes, EXPERIMENTER checks to see if everyone has finished. The booklets are then collected.

"Now, I would like to explain the study, and answer any questions you may have."

The debriefing hand-outs are distributed to each subject.

**Appendix D. Booklet 1 (for first part of experimental session)**

This booklet contains background information concerning fifteen applicants who applied for the "Young Research" program this year. Information about each applicant is followed by a series of questions on your impressions of the applicant and his/her possibilities. Read all the information carefully, and answer the questions as best you can.

1. Applicant number \_\_\_\_\_

a) General Background of Applicant

Name: \_\_\_\_\_

Age: 20

Gender: male

Place of Birth: Punjab, India

Place of current residency: Vancouver, B.C.

Languages spoken: English and Punjabi

Marital status: single

Last graduated from: Lord Byng High School

Current standing: Third-year student at U.B.C.

Courses taken: Engl100, Ansol100, Engl105, Math100, Psych100, Psych120

Major: Sociology

How did you hear about the program?:

- i) from a professor
- ii) from a friend
- iii) from notice board
- iv) other

Why did you apply?:

- i) for experience
- ii) to make money
- iii) to further interest
- iv) to obtain skills
- v) other



## b) Grades for courses mentioned above:

Course Number	Grade	Standing
ENG 100	115	SECOND
ANSO 100	108	SECOND
ENG 105	90	P
MATH 100	130	FIRST
PSYCH 100	120	FIRST
PSYCH 120	117	SECOND

c) The following questions are about your impressions of this applicant. Your answers are important. Think carefully and tick in the space that you think is most appropriate.

i. What are your overall impressions of this applicant?

He/she is:

motivated	_____	unmotivated
confident	_____	insecure
interested	_____	uninterested
studious	_____	lazy
involved	_____	uninvolved
competent	_____	incompetent
likable	_____	unlikable
consistent	_____	inconsistent

ii. What would be your evaluation of this applicant's grades?

low \_\_\_\_\_  
 below average \_\_\_\_\_  
 average \_\_\_\_\_  
 above average \_\_\_\_\_  
 high \_\_\_\_\_

iii. How well would you expect this applicant to do on an aptitude test?

badly \_\_\_\_\_ very well

iv. When taking an important test, research has shown that individuals set standards of performance for

themselves that they use to determine whether or not they have the necessary abilities to do well on a test. Standards can be expressed by the percentage points, much like scores obtained on a test. There is one percentage point above which individuals feel confident of their abilities, and another percentage point below which they feel sure that they do not have the abilities. These standards vary from person to person and do not necessarily coincide with objective criteria. Consider all the information about the applicant before answering.

If you were this applicant, what standard would you set for yourself in order to be confident of having the ability to do well on a test?

0%  100%

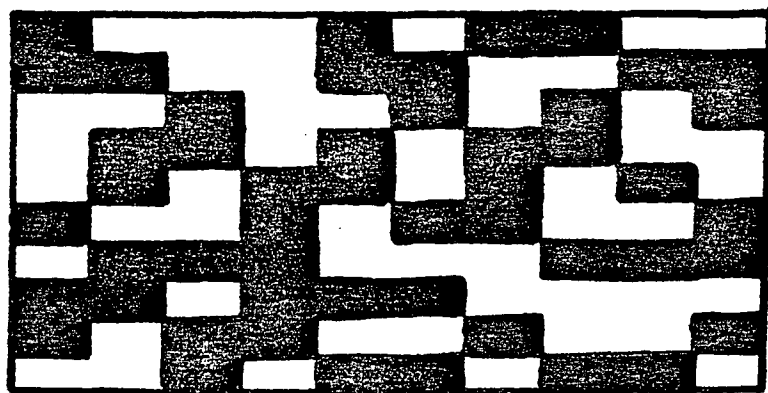
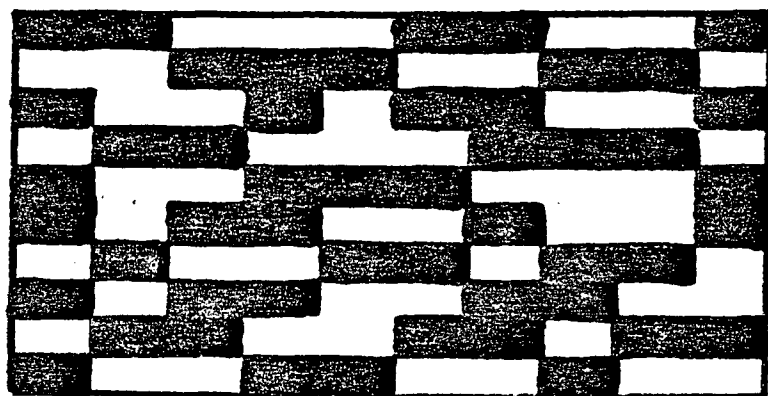
If you were this applicant, what would be the standard below which you would believe that you did not have the ability to do well on a test?

0%  100%

**Appendix E. Booklet 2 (for second part of experimental session)**

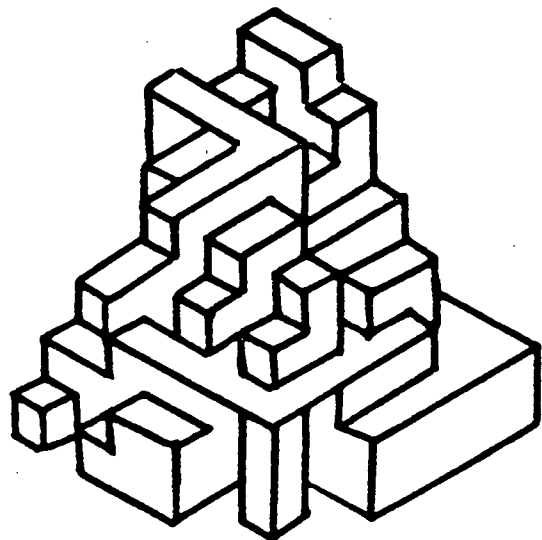
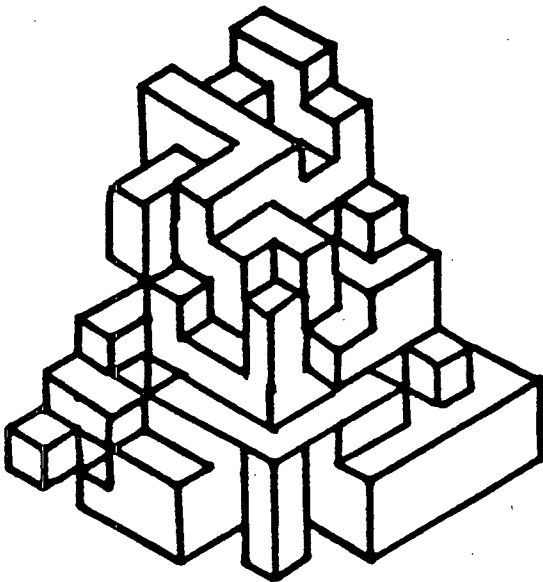
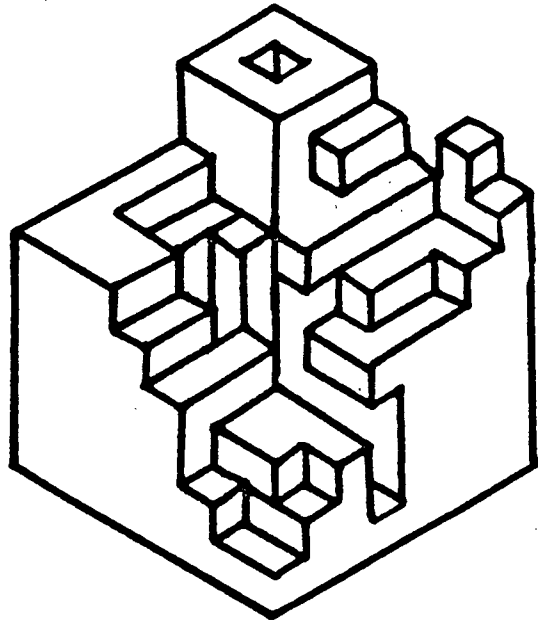
In this section, you are given the same information about each applicant as in Booklet 1, and also their scores on the Situational Capacity Test. The first pages contain examples of the test. You are asked to take all the information into consideration when answering the questions.

## Contrast Sensitivity Task



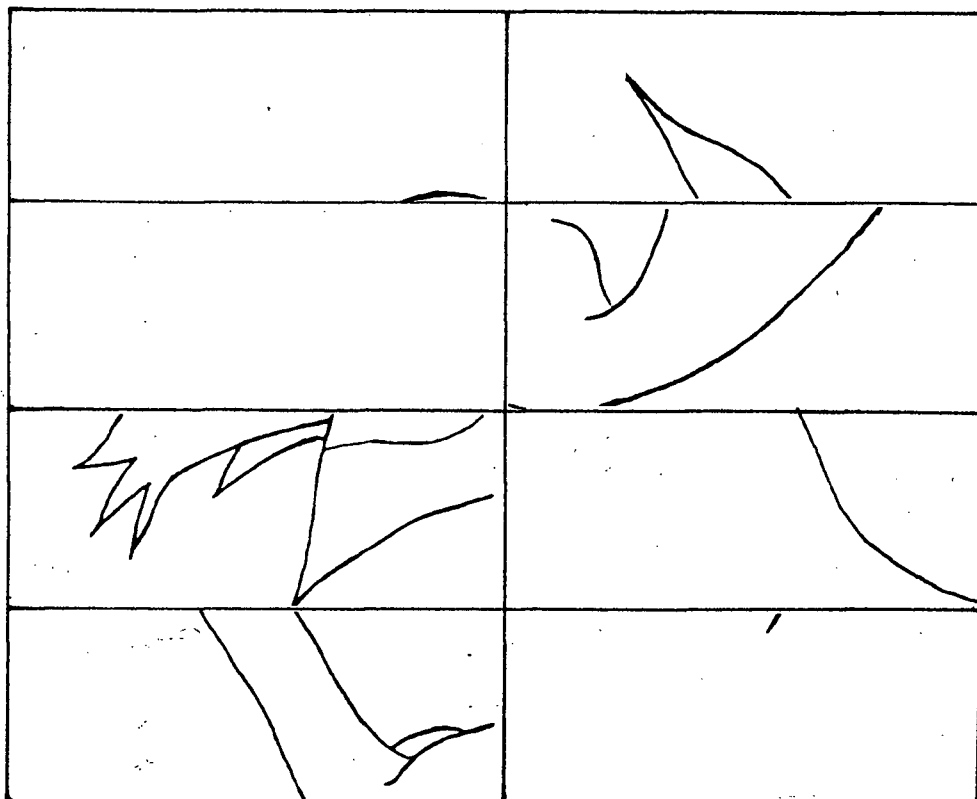
Subjects are asked to choose which of the two rectangles has more white area in it. Subjects are given 5 seconds for each pair.

## Reflexive Thinking Task



Subjects are asked to choose which of the two diagrams below can be attached to the diagram above to form a cube. Subjects are given 5 seconds to make a decision.

## Formative Sensibility Task



- a) a scarf
- b) branches

Subjects are asked to choose which of the two objects is the subject matter of the picture when the pieces are reorganized. Subjects are given 5 seconds to make a decision.

1. Applicant number:\_\_\_\_\_

### a) General Background of the Applicant

Name:

Age: 20

Gender: male

**Place of Birth:** Punjab, India

Place of current residency: Vancouver, B.C.

Languages spoken: English and Punjabi

Marital status: single

Last graduated from: Lord Byng High School

**Current standing:** Third-year student at U.B.C.

Courses taken: Engl100, Anso100, Engl05, Math100; Psych100, 120

**Major: Sociology**

How did you hear about the program:

- i) from a professor
- ii) from a friend
- iii) from notice board
- iv) other

**Why did you apply?:**

- i) for experience
- ii) to make money
- iii) to further interest
- iv) other



b) Grades for the courses mentioned above:


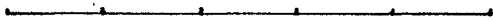
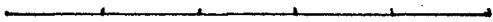


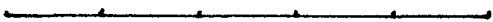



Course number	Grade	Standing
ENG 100	115	SECOND
ANSO 100	108	SECOND
ENG 105	90	P
MATH 100	130	FIRST
PSYCH 100	120	FIRST
PSYCH 120	117	SECOND

## c) Score for Situational Capacity

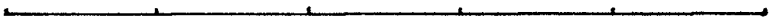
Section 1.	Section 2.	Section 3.	Section 4.	Total
20/25	20/25	14/25	24/25	78/100

d) The following questions are concerned with your impressions of the applicant and the program. Your answers are important. Think carefully and tick in the space that you think is most appropriate.

i. In your opinion, how much of this applicant's outcome on the test was due to each of the following factors?

effort	0%		100%
difficulty of the test	0%		100%
ability	0%		100%
age	0%		100%
luck	0%		100%
experience	0%		100%
intuition	0%		100%
area of study	0%		100%
others: specify			
_____	0%		100%

ii. What score do you think constitutes success on this test?

0%		100%
----	---	------

What score do you think constitutes failure on this test?

0%

100%

iii. Overall, how would you evaluate this applicant's performance on the test?

low\_\_\_\_\_

below average\_\_\_\_\_

average\_\_\_\_\_

above average\_\_\_\_\_

high\_\_\_\_\_

iv. For this specific test, if you were this applicant, what standard would you set for yourself in order to be confident of having ability to do well on this test?

0%



100%

Also for this specific test, if you were this applicant, what would be the standard below which you would believe that you did not have the ability to do well on this test?

0%



100%

v. How well do you expect this applicant to do on a similar test in the future?

badly



very well

vi. Do you think this applicant should be accepted for the program?

Yes\_\_\_\_\_

No\_\_\_\_\_

e) In the following series of questions, we would like to know your impressions of the evaluation procedure that you have just completed. For each question, check the answer that best represents your feelings.

agree

uncertain

disagree

I was very serious  
about making the  
correct decisions

Making a fair  
evaluation for each  
applicant is  
important

The process used to  
select applicants is  
sufficient

More information  
regarding each  
applicant is  
necessary to reach  
a fair judgement

I felt that the  
applicants were  
serious about  
getting the award

I lost interest in  
trying to make  
accurate  
evaluations

I took all the  
available  
information into  
consideration when  
answering the  
questions

The demographic  
information was  
very important

This is an  
important program

This study is  
helpful to the  
program

This study is  
helpful to students

Student input in  
programs such as  
this is important

f) i. What were the factors that differentiated the applicants?

ii. Did you take them all into account when making the evaluations?

g) What factors in particular were important in making your evaluations of the applicants?

Which of the following information factors did you notice?

- |                          |                          |                  |
|--------------------------|--------------------------|------------------|
| *gender                  | *high school             | *area of study   |
| *age                     | *reasons for application | *course standing |
| *number of courses taken | *ethnicity               | *marital status  |
| *place of birth          | *others: specify_____    |                  |

h) What types of information should be important in choosing successful applicants?

i) Do you feel that this is a valuable program for students?

yes \_\_\_\_\_

no \_\_\_\_\_

Why?

j) How could the evaluation procedure be improved?

k) Please give us your overall comments on the study.

## Appendix F. Instructions for Debriefing

Now that you have completed the study, we would like to explain some things about it, and answer any questions you may have.

First, the real purpose of this study was to investigate the effects of ethnicity on the assessment of performance outcomes. In other words, we were looking at how information regarding ethnic background is used when assessing the achievements of a stranger. In this study, this was done by providing limited background information about fifteen people, and finding out whether the information regarding ethnicity was used in the assessment process, and if so, to what extent. We are interested in general trends that may be observed concerning ethnicity and assessments. Therefore, individual results are not important by themselves.

As you may have guessed by now, the "Young Research" program does not really exist, and the applicants whom you read about were hypothetical people.

We needed to create a situation in which a person is required to make an initial assessment of the performance outcome of a group of ethnically diverse individuals. The program was created as a credible setting in which decisions would be made. The applicants were created by randomly putting together various types of information. The situational capacity ability was created to see how such an information would be used in the assessment process. It may be evident to you that the ability is not real, but rather a procedure used by social scientists to examine how much importance people place on limited information.

This study was carried out in a laboratory and information was given in written form for two reasons. In a natural setting, it is difficult to keep track of the types of information that are used to assess achievement since human communication is so diverse. For example, when forming first impressions about a person, information transmitted by such subtle things as facial expression may affect the evaluation. A laboratory setting is used to avoid these factors. Such a setting allows us to control the types of information



that you receive. In this way, we can ascertain whether or not ethnicity makes a difference in assessments.

Everyone who takes part in this study receives false information. This is the only way that we can objectively determine how information is processed. We hope that you now understand why we could not tell you at the beginning that the program and the ability do not really exist. If you had received this information at the beginning, it is likely that it would have changed your behavior, and therefore that the study would not be valid.

The importance of this study lies in identifying when and how ethnicity is used as a discriminating characteristic. By doing a study such as this, preventive measures may be suggested. We hope that you now understand the motive for doing the study, and the reasons why you were given created information. If you feel uncomfortable about any aspects of the study, or are curious about it, please feel free to ask questions after you have finished reading this. We will be only too happy to discuss it with you.

This study will be going on for some time, and it is important to us that people who come for it do not know beforehand about its real purpose. If you meet anyone who is planning to come, please do not discuss the study with that person. We appreciate your help in this respect.

Thank you very much for being a participant in this study. We hope that it has been an interesting experience.

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