

THE ROLE OF SECURITY OF SOCIAL IDENTITY  
IN INTERGROUP RELATIONS

by

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### ABSTRACT

Using concepts derived from Social Identity theory, this study investigated the impact of status, perceived legitimacy/illegitimacy and perceived stability/instability on intergroup bias in a real-life intergroup situation between blacks and whites in South Africa. The sample consisted of 369 students registered at the University of Natal, Durban. Of the total, 208 subjects were used exclusively in preliminary testing necessary for the development of the questionnaire. The independent variables, status, perceived legitimacy/illegitimacy and perceived stability/instability, were assessed by means of the group perception ladder; this being an adapted version of Cantril's (1965) Self-Anchoring Striving Scale. An attitude scale for black-white relations was also constructed and administered as a check on the validity of the group perception ladder. The dependent measure was the degree of ingroup bias displayed in (i) voting preferences among four candidates (2 whites and 2 blacks) standing in a mock faculty council election, (ii) evaluation of these candidates on a list of trait scales, (iii) number of student residence rooms allocated to ingroup and outgroup, (iv) relative desirability of the rooms allocated to each group and (v) the degree of integration shown in the allocation of rooms to each group.

Both the independent and dependent measures were compiled into a questionnaire, carefully randomized according to a Latin-square arrangement. This questionnaire was then administered to a group of 161 paid student volunteers of all races. Participants were unaware that race was a subject of interest. A system of colour coding was used to identify the race of the subject. The data from Indian and 'coloured' volunteers was discarded from the analysis, since blacks and whites formed the racial categorizations selected for investigation.

The data from 70 blacks and 70 whites was analysed using the statistical technique of multiple linear regression. A statistically significant pattern of results was found on two of the dependent measures, namely, ingroup bias in voting preferences and degree of integration. The findings provided partial support for the predictions of Social Identity theory. Under conditions where stability/instability was found to have a significant effect, the perception of instability generally resulted in an enhancement of ingroup bias. A significant effect for status was only found when the status relations were perceived as legitimate. Perceived legitimacy was found to be more salient in the low status group; eliciting a stronger reaction from its members. In both the high and low status groups those who perceived the social stratification as illegitimate were found to display lesser ingroup bias than comparable others who believed that the status system is legitimate. While Social Identity theory predicts such a trend for high status groups, the similar findings in the low status group is contrary to the theory. These results were evaluated against the backdrop of several methodological and practical problems associated with the research.



## CHAPTER 1

### INTRODUCTION

#### 1.1 Intergroup Relations

The nature of our social interactions with those around us is largely determined by our membership or non-membership in some or other group. Group memberships play an important role in our social relations, attitudes, values and norms. The greater part of all present-day international relations is concerned with the processes of unification and diversification between groups. Consequently, if social psychology is to be meaningfully related to contemporary social realities, it is essential that it embraces the study of the processes of interaction between large-scale groups. Recently, Turner (1984) remarked that "a social psychology without an adequate analysis of the group concept, is to a very real extent, like Hamlet without the prince!" (p518)

After a period of quiescence in the 1950s and 1960s, intergroup relations has recently emerged as an important socio-psychological topic for research and study (Wetherell, 1982). In a review on developments within the area, Brown (1984) noted that eight major books on the subject were published during the past decade. As a topic of research, intergroup relations represents an enormous area replete with a difficult and complex knot of problems. One merely needs to scan recent news headlines to become aware of the magnitude and diversity of the problems associated with intergroup relations. This chapter reviews some of the major theoretical analyses within social psychology which have been proposed in an attempt to gain a better understanding of the problems of intergroup relations.

## 1.2 The Study of Intergroup Relations

The study of social groups encompasses both the interaction between members of small groups and the psychological correlates of behaviour between large-scale social categories such as nations, races, ethnic and religious groups. In a review of the social psychology of intergroup relations, Tajfel (1982) pointed out that investigation into group phenomena has been characterised by a number of approaches or perspectives rather than any tight theoretical articulations.

## 1.3 Individualistic Perspectives on Intergroup Behaviour

The theoretical analyses behind much of the earlier research on intergroup phenomena is characterized by an individualistic perspective which assumes that the uniformities displayed in group behaviour are explainable in terms of individual psychological processes such as motivation and frustration. Although these theoretical accounts consider the social settings of intergroup behaviour, the psychology of the individual is in itself seen as the starting point for all social interactions. To lend substance to a discussion of the inadequacy of the individualistic perspectives and by contrast, the merits of group approaches, some of the more influential individualistic theories will be outlined.

### 1.3.1 The Frustration-Aggression Hypothesis

Dollard et al (1939) developed a theoretical account of prejudice and discrimination by combining certain psychoanalytic insights with concepts derived from learning theory. Frustration and aggression were believed to be the fundamental variables in the development of an explanatory model which would have direct implications for the understanding of intergroup behaviour.

The original version postulated an invariable relationship between frustration and aggression where frustration is always an antecedant condition for aggression. This hypothesis was not only used to explain individual aggression; it formed the basis of an analysis of intergroup behaviour. Dollard et al (1939) proposed that the aggressive energy, produced by the inevitable frustrations associated with organised social living, is displaced onto certain outgroups. In this way outgroups provide a 'scapegoat' function which helps to preserve and maintain ingroup cohesion. Intergroup phenomena such as prejudice is seen as the uniform expression of aggression by large numbers of individuals. Dollard (1939) attributed the rise of Nazism during the 1930's to the frustrations of the Germans after the Treaty of Versailles. Thus, frustration-aggression theory assumes a direct linearity between the psychology of the individual and the psychology associated with group membership (Billig, 1976).

Evidence of the frustration-aggression theory of prejudice is derived largely from a study by Hovland and Sears (1940) which reported a strong inverse relation between economic prosperity and the number of lynchings in the United States. According to this analysis, bad economic conditions enhanced frustration thereby instigating greater aggression expressed in the act of Negro lynching. However, the hypothesized invariable relation between frustration and aggression was not verified by further experimentation. As a result, major qualifications and modifications were introduced. Miller (1941) modified the initial version by reporting that frustration does not inevitably lead to aggression. Rather, aggression is one of a number of possible consequences of frustration. The experimental research of Berkowitz (1962, 1965, 1971) pointed to the importance of intervening cognitive and motivational components such as unfulfilled

expectations and previous learning. The original hypothesis was subsequently reformulated to include situational cues and emotional and cognitive states (Billig, 1976). Moreover, an experimental study of the frustration-aggression relationship in South Africa produced findings which contradict the basic premise of Dollard's theory. The effect of experimentally induced frustration on intergroup attitudes was investigated. A surprise finding emerged. Frustration led to a more sympathetic attitude accompanied by a decrease in social distance indices (Lever, 1976).

Generally, the findings of experimental testing indicate that there are several problems which are not adequately resolved within the theory. The question as to how and why certain groups become a target for displaced aggression is left largely unspecified. As a conceptual tool its explanatory and predictive value is further limited by the inability to account for the formation and continuance of groups (Billig, 1976). It is an approach to intergroup behaviour which, even in its revised form, relies almost exclusively on inner motivational states in its explanation of the uniformities associated with group behaviour. The implication that large-scale social phenomena can be wholly accounted for by individual emotional states is problematic. As Billig (1976) and Brown and Turner (1981) point out it ignores important socially-determined variables such as conformity to prevailing norms and ideology. These theorists suggest that the origins of collective frustration and the selection of targets for displaced aggression are more probably rooted in the shared beliefs and goals associated with group membership. Thus, it seems that the frustration-aggression hypothesis as postulated by Dollard et al (1939), is both too simple and too general to offer any genuinely social analysis of group behaviour (Brown and Turner, 1981; Milner, 1981).

### 1.3.2 The Authoritarian Personality

An extensive enquiry by Adorno et al (1950) into social attitudes toward Jews and a variety of other minority groups, led to the identification of the "Authoritarian Personality" syndrome. After noting the generalized nature of intergroup prejudice, the authors claimed that racist attitudes and behaviour could be linked with a definite underlying personality structure. A theory was formulated based on the premise that the origins of ethnocentric attitudes were to be found in the individual's personality. Very briefly, the theory states that a rigid pattern of discipline during childhood leads to the arousal of anger and hostility. Instead of being directed against the parents, this hostility is suppressed and then later projected onto certain outgroups. Thus, prejudice is believed to serve an important function within the personality; an idea which is based upon earlier psychodynamic interpretations of intergroup phenomena (Billig, 1976).

Support for this theoretical formulation has come from a number of studies. Harris, Gough and Martin (1950) found that prejudice in children could be linked to strict parental control. Frenkel-Brunswik (1954) measured prejudice in children and found that high prejudice was associated with authoritarian personality characteristics. Further evidence was derived from similar studies by Lyle and Levitt (1955) and Baumrind (1968). Notwithstanding the enormity of the methodological criticisms of the research on authoritarianism and prejudice (cf. Kirscht and Dillehay, 1967), there also exists a body of experimental research which renders the assumption of the generality of prejudice questionable. The nature of attitudes towards different outgroups have been shown to differ according to socio-cultural variables such as socio-economic status, educational attainment patterns. According

to Bloom (1971) the value of the approach of The Authoritarian Personality is that it indicates some of the personality variables that determine susceptibility to prejudice and discrimination. However, as Billig (1976) argues, the investigation of the roots of such social phenomena must extend beyond the psyche of the individual to the realm of the forces within the social context and the groups that exist within it.

### 1.3.3 Belief Congruence Theory

Rokeach (1960) proposed that similarity or congruence between individuals' belief systems is more important than social group memberships in determining patterns of acceptance or rejection. Intergroup discrimination is believed to result from the perceived dissimilarity or incongruence between the beliefs of the ingroup and the outgroup. Thus, blacks are discriminated against, not because they belong to a specific social group, but because they are assumed to hold different beliefs from the people who are the discriminators.

Empirical support for this theory of intergroup behaviour, has come from a number of studies using an experimental method often referred to as the race-belief experimental paradigm (Brown and Turner, 1981; Turner, 1984). In this paradigm subjects are typically required to indicate their attitudes towards a number of stimulus persons who may differ from the subject in terms of either race or belief. The responses are then analysed to determine whether race or belief is of primary influence. Several studies have shown that belief is more important than race (Rokeach, Smith and Evans, 1960; Byrne and Wong, 1968 and Taylor and Guimond, 1978).

Brown and Turner, (1981), argue that the findings of the race-belief studies have no implications for intergroup behaviour. They point out

that the race-belief paradigm operationalizes individuals' beliefs as their personal attributes rather than as shared effects of their common category membership. Within the theory itself, belief congruence is seen as a property of the psychology of the individual distinct from the beliefs, norms and values within the wider social context or more specifically, the context of group membership. Therefore, it would seem that Rokeach (1960) suggests that intergroup relations depend upon the consistency of attitudes as they exist between individual persons. On this point, Taylor and Brown (1979) make the following comment:

"... it would be bordering on the absurd to suggest, to take a more important example, that the hostility between blacks and whites in Southern Africa today is caused principally by a perception of belief dissimilarity." (p176)

Belief congruence theory presupposes a linear extrapolation from individual to group situations. Brown and Turner (1981) note that interpersonal similarity is of subordinate importance in situations where people's group memberships are the issue. They claim that this trend is typified by the cliché some of my best friends are blacks, Jews etc., often used by prejudiced persons. These theorists suggest that belief may be more important than race only for relatively formal or non-ego-involving responses such as that used in the race-belief experiments. To some extent, this suggestion is verified by Boyanowsky and Allen's (1973) finding that prejudiced subjects who discriminate against blacks in social behavioural situations do not necessarily do so in non-behavioural situations, such as pencil-and-paper measures. In addition, it has been suggested that race and belief variables were not given equal experimental emphasis in the studies favouring belief (Ashmore, 1970; Brown and Turner, 1981). Other studies have produced evidence in contradiction with Rokeach's (1960) belief hypothesis.

For example, Triandis and Davis (1965) found race to be more influential than belief.

This brief discussion indicates that Rokeach's theory of belief congruence (1960) meets with some difficulties at both the methodological and theoretical level, particularly when it is applied to intergroup contexts. Brown and Turner (1981) conclude that Rokeach's theory is mostly effective in explaining interpersonal attraction.

#### 1.3.4 Appraisal of Individualistic Approaches

In two of the above approaches, attitudes and perceptions of own and other social groups are seen as spin-offs of internal tensions and emotional difficulties experienced earlier on in life. In the third approach the beliefs of the individual are assumed to be the operative variable in intergroup relations. What is of concern here, is whether large-scale problems of intergroup conflict can be adequately explained in terms of individual patterns of prejudice.

It has been generally accepted that theories such as those represented by the frustration-aggression hypothesis, authoritarianism and belief congruence are well able to account for social behaviour as it occurs between individuals (Bloom, 1971; Tajfel, 1978a; 1978b), although not in their seductively simple original forms, but together with the extensive variations that have been developed. The problem arises, however, when direct extrapolations are made from them to instances of intergroup conflict and aggression at large (Tajfel, 1978a, 1978b; Brown and Turner, 1981). Relations between national, racial, ethnic or social groups can be distinguished by their tangible basis in the social and economic context in which they occur. Hence, any explanation of the psychological correlates of phenomena such as intergroup conflict and aggression must take full cognisance of the intertwine-



ment of the social and psychological levels of causation (Tajfel, 1972, 1978b). Reading the central tenets of the frustration-aggression hypothesis and the authoritarian personality, there is a glaring over-emphasis on the psychological determinants of prejudice with only slight reference to the social antecedants.

The roots of social phenomena such as prejudice and discrimination are located in the motivations and emotional dynamics of the individual without any concern for the influence of the social, economic and political structure. Tajfel (1978a) claims that this has led to a "narrow psychologistic view of what is and always has been an important feature of all societies: recurring social conflict" (p432). Social conflict cannot be adequately explained only in terms of the psychology of the individual. Instead, the question of the psychological concomitants of intergroup behaviour must be addressed in association with the relevant social structures. Tajfel, 1972, 1978a; Billig, 1976).

The intellectual roots of the tendency to account for all social behaviour in terms of general laws of individual motivation may be found in the belief that the 'group' as a psychological entity is superfluous. To quote Allport (1924, p6):

"There is no psychology of groups which is not essentially and entirely a psychology of individuals."

and later Berkowitz (1962, p167):

"Dealings between groups ultimately become problems of the psychology of the individual. Individuals decide to go to war; battles are fought by individuals; and peace is established by individuals."

Brown and Turner (1981) maintain that the frustration-aggression hypothesis, belief-congruence theory and the concept of authoritarianism are all consequences of these theoretical sentiments. If the social group is nothing more than a collection of individuals then the logical

extension is that intergroup processes can be fully explained through the functioning of the individual. Although this type of individualism predominated for many years, it did not go unopposed.

The work of Sherif (1936, 1966) is notable for its strong opposition to reductionist social psychology. Although he agreed that psychological reality dwells only within individuals, he argued for the existence of processes related to the group context which do not exist between individuals as individuals. Using concepts derived from the Gestalt tradition, Sherif (1936) pointed out that the social group is more than just the sum of its parts. He stated that the reality of the social group has properties which are different from and not reducible to its constituent components, namely individuals. This approach was formulated in direct opposition to the belief that individual motivations and personality types may be held accountable for intergroup phenomena (Billig, 1976). Instead, he proposed a social psychology of intergroup relations which considers both the properties of groups themselves and the consequences of membership for individuals (Sherif, 1966).

More recently Tajfel (1978a) challenged the validity of the "psychological individualism" which dominated most of the investigation into group processes. He used the term psychological individualism to encompass approaches such as that formulated by Berkowitz (1962) which confine social psychological analyses to the motivational and cognitive functioning of individuals. Like Sherif (1936, 1966) he argues against a linear transposition from individual dynamics in a dyad to relations between individuals as members of large-scale group. Tajfel (1978a) calls attention to the extent to which social conduct is determined by the individual's knowledge and awareness that he/she is a member or non-member of certain groups. Consequently, he proposes that in order

to fit the requirements of psycho-social reality, any theory of intergroup relations should include recognition of the psychological existence of ingroups and outgroups, and also relate these psychological phenomena to the surrounding social structures.

#### **1.4 Group-based Approaches to the Psychology of Intergroup Relations**

Both Sherif and Tajfel have developed theoretical formulations which approach the topic of intergroup relations from the group level of analysis. These theories represent important landmarks in the social psychology of intergroup relations as they allow for "both the properties of the groups themselves and the consequences of membership on individuals" (Sherif, 1966, p62).

##### **1.4.1 Sherif's Realistic Group Conflict Theory of Intergroup Behaviour**

Sherif's theory of intergroup relations developed as a direct consequence of the findings of three field studies conducted with young male students at summer camps (Sherif and Sherif, 1953; Sherif et al, 1961; Sherif, 1966). The studies comprised four different stages so as to allow for the development of different patterns of intergroup behaviour. In the first stage, the subjects were left to form friendships while engaging in general activities on a camp-wide basis. During stage two, the boys were divided into two groups through the separation of their living quarters and camp activities. Friends were purposefully assigned to different groups. It is reported that during the course of this stage role differentiations and hierarchies evolved within the groups. The camp authorities organised a number of intergroup competitions during the third stage of the experiment. As a result, overt hostility and conflict developed between the groups. In the last experiment, a fourth stage was introduced designed to diminish the negative intergroup relations in the previous stage. This was

achieved through the introduction of superordinate goals; defined as goals that have compelling appeal and are desired by each group but are unattainable without the participation of the other group. Both groups were placed in difficult settings where joint action was necessary to get them out.

The results of the boys' camp experiments were formulated into a functional theory of intergroup relations. The theoretic analysis focusses upon the existence of competitive and superordinate goals in intergroup situations. The essential predictions are:

- 1) incompatible goals or competition between groups over scarce resources causes intergroup conflict, and
- 2) superordinate goals or co-operative activities between groups induces social harmony.

Therefore, the social relations between groups are accounted for by their functional goal relations. Sherif also explains the formation of social groups in terms of the achievement of goals: cohesive group structure emerges from co-operative interdependence of the attainment of goals and sharp ingroup-outgroup boundaries result from competitive goal-related activity.

Setting aside the theoretical details for the moment, the importance of Sherif's contributions needs to be discussed from the point of view of its approach to the problem of intergroup behaviour. Both the theoretical framework and methodological structure are in agreement in as much as they represent a departure from individualistic approaches (Billig, 1976). As Tajfel (1978a) points out, the subjects in Sherif's studies were healthy, 'normal' American boys who behaved as they did as a direct result of the intergroup setting in which they found themselves. As opposed to earlier approaches, their behaviour was not conceptualized in terms of any coincidence of emotional or motivational

problems. Rather, the behavioural observations cannot be fully understood unless they are seen in relation to the surrounding intergroup setting (Tajfel, 1978a). The summer camp environment enabled the researchers to skillfully create a context within which phenomena uniquely linked to the group setting could be examined. Billig (1976) has described the methodological contribution of the camp studies as an important landmark in social psychological research into intergroup relations. The basic design of the studies permitted the investigation of the psychological factors involved in the development and reduction of intergroup conflict.

Equally significant is Sherif's formulation of the concepts of competitive and superordinate goals in terms of groups. These goals are present as complex social phenomena which exist within a context of group membership. As Billig (1976) notes the goals refer to the shared perceptions among group members. Behaviour between groups is held to be consequent upon group membership. Hence, Sherif's orientation is more holistic in the sense that it avoids the limitations of the earlier reductionist approaches.

Having considered the wider implications of Sherif's contribution to the study of intergroup processes, the next focus for discussion is the validity of the theoretical statements. Can the psychological correlates of group behaviour be fully accounted for by the functional goal relations between groups?

The results of studies designed to test Sherif's ideas tend to support the basis hypotheses of Realistic Group Conflict theory. In a review of research on the topic Turner (1982) quotes the following studies: Blake and Mouton (1961, 1962); Bass and Duntzman (1963), Fiedler (1967), Diab (1970). Generally the results of these studies confirm

the functional hypothesis that competitive interaction produces a social orientation which enhances cohesive intragroup relations but disrupts intergroup relations. With the introduction of a competitive orientation into a group situation, there follows ingroup bias in the perception of outgroup members, discriminatory behaviour and a refusal to openly negotiate over probable solutions (Turner, 1982). Hence it appears that Sherif (1966) was correct in his interpretation of the consequences of competitive interaction.

A common feature through both Sherif's camp studies and the replications which have been conducted (for example Blake & Mouton, 1962) is the existence of an explicit conflict of interest between groups. As Tajfel (1978a) points out, the conflict in Sherif's studies was clearly explicit to the subjects. Indeed, the camp authorities instituted organised competition between the groups during the third stage. Similarly, the studies of Blake and Mouton (1962); Bass and Duntzman (1962) and Diab (1970) investigated ingroup bias after the introduction of actual competition. This raises the question of whether competition is in fact a necessary condition for the manifestation of group-based behaviours.

Many researchers have indeed, investigated the possibility that similar forms of intergroup behaviour may exist in the absence of an explicit competitive orientation. As early as 1964 the results of research by Fergusson and Kelley suggested that Sherif and his colleagues might be misguided in their emphasis on functional independence per se in the elicitation of intergroup discrimination. In Fergusson and Kelley's (1964) experiment, groups of subjects, after having completed various tasks, were asked to judge the products of their own group and of specific outgroups. It is noteworthy that ingroup bias occurred even though any kind of competitive behaviour was avoided in the design.

Doise et al (1971, 1972) studied the effects of co-operation, competition and coaction on intergroup attitudes. The ingroup was evaluated more favourably, irrespective of the type of interaction. Similarly, Rabbie and Wilkens (1971) found that both intergroup coaction and competition produced ingroup bias both before and after interaction. The results of studies such as these which manipulate or control type of intergroup interaction under various conditions of intergroup competition and co-operation. Hence, it is evident that an intergroup conflict of interests is not a necessary condition for the appearance of intergroup discrimination and as such behaviour can also occur in co-operative intergroup situations.

During the 1970's there accumulated a substantial amount of experimental evidence which demonstrate that the mere division of individuals into groups without interaction is sufficient to generate intergroup behaviour (Doise et al, 1971, 1972; Tajfel et al, 1971; Billig, 1972; Billig and Tajfel, 1973). Hence, Sherif's theoretical formulations are incorrect insofar as it stresses the importance of functional interdependence as a determinant of intergroup attitudes. Nevertheless, Realistic Group Conflict theory has been productive in investigating the effects of competitive and co-operative interaction. By contrast, recent research on intergroup relations is by and large supportive of the Social Identification model, as developed by Tajfel (1978b, 1981) and Tajfel and Turner (1979). This explanatory model forms the subject of the next chapter.

## CHAPTER 2

### THE SOCIAL IDENTITY THEORY OF INTERGROUP RELATIONS

Tajfel (1978b, 1981) and Tajfel and Turner (1979) have been largely responsible for presenting a new perspective on the social psychology of intergroup relations. As an explanatory model of intergroup behaviour, Social Identity Theory as it is currently known, avoids many of the pitfalls of the earlier approaches.

Firstly, it represents a social psychological account of intergroup behaviour which is firmly based in the social context. The behaviour of different groups in relation to one another is seen as a joint function of certain social psychological processes and of the socio-economic relations between groups. Tajfel (1978b) stresses that the processes in question are "not conceivable outside of the social settings in which they function" (p4). Social Identity Theory goes a long way in taking account of the dialectical nature of the relation between the subjective psychological and socio-structural determinants of intergroup relations. This aspect is exemplified in the way in which perceptions of the social organisation are incorporated as important antecedents of intergroup behaviour (discussed later).

Secondly, it is an approach which provides a theoretical integration of several characters of inter-individual, intra- and inter-group behaviour in terms of both cognitive and motivational processes. In its explanation of the psychological determinants of different types of social behaviour, the social group is conceived of as more than just a collection of individuals. Different levels of behavioural phenomena are accepted as such, so that neither the individual is obscured in a purely group psychology nor is the group reduced to the problems of individual psychology.



## 2.1 The Behavioural Continuum: Interpersonal and Intergroup Behaviour

Tajfel (1978b, 1981) describes all instances of social interaction in terms of a continuum of behaviour ranging from the purely interpersonal to the purely intergroup. On the interpersonal pole of the continuum any social interaction between individuals is determined only by their individual characteristics and the nature of the personal relationships between them. On the intergroup extreme, interactions are fully determined by the participants' memberships in various social groups. Tajfel (1981) acknowledges that these extremes are hypothetical constructs in the sense that instances of purely interpersonal or purely intergroup behaviour are seldom achieved in reality. But, as Brown and Turner (1981) demonstrates, there are a number of examples which bear close similarities. For example, the intimate conversations between two lovers are largely determined by interpersonal factors. An instance of purely intergroup behaviour may be found in a war situation where soldiers of opposing armies are completely out of sight of each other. In such a case the groups to which the individuals belong are likely to be of utmost significance. Most social behaviour, however, falls somewhere between these two extremes.

A shift from the interpersonal to the intergroup end of the continuum has several implications of intergroup relations. Tajfel (1978b, 1981) identifies two important trends:

- i) the nearer the social situation to the intergroup extreme of the behavioural continuum, the more uniformity will the individual members of groups concerned show in their behaviour towards members of outgroups, and
- ii) there will be a stronger tendency for members of the ingroup to treat outgroup members as undifferentiated items in a social

category.

Therefore, the transition from the interpersonal to the intergroup poles of the continuum is paralleled by a transition towards uniformity in the treatment of outgroup members. Expressed differently, it can be said that a shift towards intergroup behaviour is accompanied by a decrease in variability in the perception of members of outgroups (Tajfel, 1982). Ingroup favouritism is correlated with the position that intergroup relations take on this continuum. The closer social interactions are to the ingroup extreme, the stronger the intergroup discrimination.

Empirical evidence for the existence of an interpersonal - intergroup distinction comes from the consistent finding that there is some characteristic difference between relations between social groups and relations between individuals (Turner, 1981). Doise and Sinclair (1973) observed that groups are more competitive than individuals under the same conditions. Turner (1978a) compared strategies of reward allocation between conditions of explicit categorization of subjects into groups versus a non-categorization condition. As predicted, the former subjects showed discriminatory responses in favour of the ingroup and outgroup members. These results, then, support a distinction between interpersonal and intergroup behaviour. A similar experiment by Brown and Deschamps (1980) verified Turner's (1978a) findings. In conditions where group membership was de-emphasized, self-favouritism was the dominant strategy. By contrast, explicit categorisation decreased self-favouritism such that ingroup favouritism became the overwhelming choice, clearly supporting Tajfel's behavioural continuum.

Tajfel (1978b) described his theoretical framework as a "conceptual

tripod" which involves three interrelated social psychological processes: social categorization, social identity and social comparison. These linked concepts will be discussed in the following sections.

## 2.2 Social Categorization

An important aspect of the social environment is the existence of collections of individuals who differ from one another along a number of dimensions. Wilder (1981) notes that in most social situations we are bombarded with an infinite amount of stimulation. Because we cannot possibly process such a complex array of information, people develop short-cuts by categorizing selected stimuli.

Tajfel (1978b, 1981) describes social categorization as a cognitive tool that enables us to categorize, segment and simplify the social environment in terms of discontinuous groupings of persons on the basis of criteria that have relevance for the classifier. Common criteria in our society are race, sex, class, religion and nationality. Other criteria are hair colour, body structure and temperament. The distinction between these two types of criteria is that the former categories are characterized by an evaluative (positive and negative) and an emotional component (love, hate). Thus, a value dimension is added to social categorization. This latter feature constitutes the essential difference between categorizations in the social world and those applying to physical stimuli.

In order to fully understand the behavioural effects of social categorization, the consequences of categorization as a cognitive process need to be considered first. Wilder (1981) has summarized three important functions of categorization:

- i) it enables us to simplify and reduce the complexity present in

our environment,

- ii) categorization makes it possible for us to generate expectations about the properties of objects, and
- iii) it permits us to consider a greater amount of information at any one time.

These functions are collectively achieved through the principle of accentuation. Several early studies on perception (eg. Campbell, 1956; Bruner, 1958 and Tajfel and Wilkes, 1963) observed the phenomenon whereby similarities within, and differences between items classified as belonging to the same or different categories respectively, were accentuated. Social Identity Theory applies this principle in the conceptualization of the process of social categorization. Tajfel (1978b, 1981) maintains that the introduction of value differentials in social categorization results in a more emphatic accentuation of the perceived intragroup similarities and the perceived intergroup differences. This has certain consequences for intergroup relations: (i) differences within a group or category will be minimized and (ii) differences between groups or categories will be exaggerated, over and above the reality of the situation. Tajfel (1978b, 1981) argues that the interaction between socially derived value differentials and the cognitive mechanics of categorization is particularly important in all social divisions, in that the motivational components act to determine the structure of intergroup relations.

Recent evidence has verified the operation of social accentuation in intergroup perception. Wilder (1978) found that subjects in a situation of random group assignment, perceived themselves to be similar to other ingroup members and different from members of another

group. Taylor, et al (1978) had subjects observe a group of interacting persons who differed in terms of either race or sex. Thereafter, subjects were presented with a list of suggestions that had been made and a set of pictures of the observed participants. The task was to match the faces and suggestions. The results showed that people were able to accurately discriminate between categories, but tend to confuse individuals within a category. Taylor et al (1978) concluded that "categorization is much more than a static mode of identifying others: it is an active mode of representing and reconstructing their behaviour." (p88)

Social Identity theory proposes an explanation of intergroup bias which rests on the role played by social categorization in the formation of group behaviour. As early as 1969, Tajfel proposed that intergroup bias may be a direct product of the perception by individuals that they are joined within a common category membership. This hypothesis emerged as a direct challenge to the theoretical formulations of functional theory (Turner, 1982). A methodology known as the 'minimal group paradigm' was developed which manipulated social categorization as an independent variable with intergroup discrimination as the dependent variable.

### 2.2.1 The Minimal Group Studies

The initial paradigmatic studies were executed by Tajfel, Flament, Billig and Bundy (1971) and explored whether the mere classification of individuals into distinct groups is a sufficient condition for the appearance of intergroup discrimination. In order to create minimal conditions, subjects were randomly divided into groups on the basis of some trivial criterion (eg. the toss of a coin). Group membership was anonymous and all attributes usually associated with real-life

groups were eliminated. There was no face-to-face interaction, conflict of interests, any previous history of interaction or any utilitarian value to be gained from ingroup identification. Subjects worked individually in separate cubicles. The task was to divide monetary rewards between ingroup and outgroup members by choosing from a variety of possible strategies. Significant intergroup discrimination was found. Subjects consistently discriminated in favour of the ingroup and against outgroup members. Moreover, it was often the case that subjects made decisions which maximised the difference in rewards between the groups, even though this meant a smaller absolute sum for the ingroup.

Subsequent research programmes have consistently confirmed the initial findings. Possible confounding variables were investigated in several experiments. Billig and Tajfel (1973) controlled for the influence of perceived similarity among ingroup members. Even in the conditions where there was no reason for subjects to like members of the group, discrimination was demonstrated. Further investigation ruled out the possibility that subjects were responding to demand characteristics or in terms of social norms (Billig, 1973; Tajfel and Billig, 1974; Doise and Sinclair, 1973; Doise, et al, 1972).

The above experiments confirm the initial hypothesis that the mere act of categorizing persons into ingroups and outgroups is a sufficient condition for the manifestation of a differentiation of attitudes and behaviour which favours the ingroup against the outgroup.

### 2.3 Social Identity

Social categorizations do not merely divide the social world into distinct categories in which others can be located, they also serve to define the individual's place in society by providing a system of

orientation for self-reference. According to Tajfel (1978b) social groups provide their members with an identification of themselves in social terms. Social identity is described as that "part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership." (Tajfel, 1978b, p63).

Turner (1982) hypothesized that group membership becomes internalized as one of two major subsystems of the self-concept: personal identity and social identity. The former refers to definitions of self in terms of personal and idiosyncratic attributes such as personality traits, whereas the latter denotes definitions of self in terms of memberships of various groups. Therefore, group membership is conceived of as an aspect of the self-concept. Social identification can also be understood as the process which binds an individual to his/her social group and by which the social self is realised (Billig, 1976). Two aspects of social identity are incorporated in the theory; namely, social identity as an active process and as a cognitive structure.

Most people are members of a variety of different groups such as sex, race, religion, nationality, sports group etc., but these group memberships vary in their importance and salience to an individual. Turner (1982) proposed that the self-concept is a relatively enduring, multi-faceted system which is structurally and functionally highly differentiated so that its parts are able to operate relatively independently of each other. In any given social situation a different part or combination of parts of the self-concept may be at work. Different situations tend to 'switch on' different identifications of self so that at certain times an individual's behaviour may be influenced

primarily by his/her group membership. Once some specific social identification becomes salient, the self and others will be perceived of in terms of the relevant group membership.

According to Turner (1982), the transition in self-concept functioning from personal to social identity, corresponds to and is responsible for a shift from interpersonal to intergroup behaviour. Whenever group memberships become salient, there will be a transition from interpersonal to intergroup behaviour. Thus, Turner (1982) extends the conception of the behavioural continuum by hypothesizing that interpersonal and intergroup behaviour are controlled by differing psychological processes located in the self-concept. However, Turner (1984) is careful to point out that the personal and social identity are not mutually exclusive. Rather, they can operate simultaneously so that most of the time the individual perceives him/herself as moderately different from other ingroup members and moderately different from outgroup members.

Tajfel (1978b) suggested that the number and variety of social situations which an individual will perceive as being relevant in some way to his/her group membership will increase as a function of:

- i) the clarity of his/her awareness that he/she is a member of a certain group
- ii) the extent of the positive or negative evaluations associated with this membership, and
- iii) the extent of the emotional investment in the awareness and the evaluations.



## 2.4 Social Comparison

The notion that social groups or categories are associated with positive or negative value connotations forms one of the basic assumptions of Tajfel's theory. It is through the process of social comparison that the evaluative dimension of group membership is determined. This process involves an evaluation of one's own group with reference to specific other groups in terms of value-laden characteristics such as skin colour, sex, language, wealth etc. In other words, the characteristics of one's group achieve their significance in relation to perceived differences from other groups (out-groups) and the value connotations of these differences (Tajfel, 1978b). Tajfel and Turner (1979) delineate three necessary conditions for social comparison to occur:

- i) group membership must have been internalized as part of the self-concept,
- ii) the outgroup must be perceived as a relevant comparison group, and
- iii) the attributes on which the comparison is made must have importance for both groups.

The following quotation serves to integrate the theoretical concepts explicated thus far:

"A comparative aspect ... (social comparison) ... links social categorization with social identity."  
(Tajfel, 1978b, p64).

### 2.4.1 Status Hierarchies

The outcome of the social comparison process is a gradation which is termed a status hierarchy. The basic assumption is that social differentiation is associated with status differences between groups. In this context, status reflects a group's position on some evaluative

dimension of comparison. If a group is perceived to be superior to another on some relative dimension, it has high status; if it is perceived as inferior, low status. In other words, the more positive characteristics attributed to the group, the higher that group's status. Turner and Brown (1978) have made the following observation concerning the perceived status of groups:

"The basis of a group's status seems to be, more or less, its position in the political and socio-economic structure of society; dominant groups tend to have higher status than subordinate groups."  
(in Tajfel, 1978b, p201)

Perceived status, being the outcome of social comparison, will determine whether the group membership contributes positively or negatively to the individual's social identity. If the result of comparisons between ingroups and outgroups reveals high status for the ingroup, its members will have a positive social identity. If, on the other hand, social comparison leads to low status for the ingroup, the individual will have a negative identity.

#### 2.4.2 Positive Distinctiveness

A central tenet of Social Identity Theory is that individuals have a need for, and are thus motivated to strive for a positive self-concept. Because social identity refers to aspects of the concept of self, self-concept needs also inform the need to establish or maintain a positive social identity. Thus, the need for positive social identity motivates a tendency to seek positive distinctiveness for one's own group in comparison with other groups.

There has been wide support for the belief that group members seek to evaluate their own group positively relative to specific other groups (Hewstone and Giles, 1984). Turner (1980) maintains that the tendency

to favour the ingroup in relative outcomes for ingroup and outgroup members seems the single most important motive in the minimal group paradigm. In a discussion on social identity and social comparison, Turner (1975) gives a full account of the relation between social comparison and the minimal group results. He argues that ingroup favouritism, measured by awarding more money to the ingroup relative to the outgroup, was the only means whereby positively valued group distinctiveness could be achieved. Thus, a positive social identity was created by discriminating against the outgroup. Recently, Oakes and Turner (1980) confirmed that the opportunity for intergroup discrimination is associated with increased self-esteem in comparison to a control condition where subjects are not permitted to discriminate.

Tajfel (1978b) hypothesizes that "the need for differentiation (or the establishment of psychological distinctiveness between groups) seems to provide, under some conditions the major outcome of the sequence social categorization - social identity - social comparison." (p83)

## **2.5 The Social Mobility - Social Change Continuum**

The major consequence following the recognition of identity in socially defined terms is the assumption that an individual will remain a member of a group as long as that membership contributes positively to his/her social identity. Therefore, if the outcome of the social comparison process affords a negative social identity on ingroup members, these individuals will engage in strategies to achieve positive distinctiveness, since their need for a positive self-concept has been denied.

The individual's response to a negative social identity will be reflected somewhere along a continuum of structures of beliefs which

moves from the extreme of social mobility to the extreme of social change. This continuum is inextricably linked with the interpersonal - intergroup continuum of social behaviour. Social mobility refers to an attempt by individuals to move as individuals from a low status group to a higher status group. A social mobility response is an individualistic one, since it does not attempt to alter the existing intergroup relations. On the other hand, a social change response is an attempt to change the nature of the intergroup situation. Individuals adopting the latter type of response will work together with the group as a whole to change the intergroup relations.

The way in which social categorization and comparison processes work is a complex matter. Tajfel and Turner (1979) recognised that ingroup favouritism as it exists between real-life groups is not simply a result of the desire to achieve positive distinctiveness. Different forms of social behaviour are in fact, determined by categorization and comparative processes in interaction with a number of other variables in the intergroup context.

Tajfel (1978b, 1981) postulates a number of factors which may determine whether a social mobility or social change response will occur:

- i) Permeability of group boundaries: The basic assumption behind the social mobility response is that the social divisions between group are flexible and permeable such that individuals are permitted to move from one group to another. Individual upward mobility may be prevented by both external and internal constraints. External constraints are factors such as authoritative legislation (for example the race laws in South Africa) or a rigid caste system. Loyalty ties and moral commitments to the group are examples of internal constraints.

- ii) Perceived stability/instability of the social stratification: A crucial condition in any intergroup situation is whether a change in the existing pattern of status relations is conceivable or not from a social psychological perspective. Perceived stability refers to an intergroup situation where there is a complete absence of cognitive alternatives of any kind that would invoke a change in the existing system of social stratification. Perceived instability refers to an awareness of alternatives in the status quo, that is the current system of intergroup relations is seen as changeable.
- iii) Legitimacy/Illegitimacy of status relations: Perceived legitimacy implies the acceptance of the existing system of stratification as just and fair. Perceived illegitimacy calls into question the principles along which stratification between groups is based. If the dimension along which status differentiation is based, is believed to be in conflict with values of justice and equity, the social stratification will be perceived as illegitimate.

Tajfel (1978b, 1981) hypothesizes that the position of an individual (or collections of individuals) on the social mobility - social change continuum of structures of belief, is a powerful determinant of the structure of intergroup behaviour.

## 2.6 Strategies of Intergroup Differentiation

The concept of social identity as defined by Tajfel (1978b, 1981) refers to a dynamic and fluid entity. It is a mechanism which plays a causal role in determining the structure of intergroup relations. The social relationships between groups are also neither fixed nor unchanging. Social identity, being based in the social context, will

change in relation to any alterations in the social comparison process. Conversely, changes in social identity will have consequences for the structure of intergroup relations. Brown and Ross (1982) point out that changes in identity are described within the theory by the notion of security of social identity.

### 2.6.1 Security of Social Identity

A secure social identity is defined as:

"A relationship between two (or more groups) in which a change in the texture of psychological distinctiveness between them is not conceivable ... there would have to exist a complete psychological objectification of the status quo with no cognitive alternatives of any kind available to challenge the existing social reality."  
(Tajfel, 1978b, p87).

By contrast, an insecure social identity is one in which cognitive alternatives to the existing status relations are available to the extent that a complete reversal of the status relations is conceivable.

Both the variables stability and legitimacy are incorporated in Tajfel's (1978b, 1981) distinction between secure and insecure social identity. Perceived stability is inextricably related to the concept of cognitive alternatives. Tajfel (1981) proposes that "the building up of cognitive alternatives to what appears as unshakeable social reality must depend upon the conviction ... that some cracks are visible in the edifice of impenetrable social layers" (p319).

The variable, perceived legitimacy is invoked in the explanation of the creation of cognitive alternatives. Tajfel (1978b) argues that the awareness of cognitive alternatives, to a large extent, depends upon the degree to which the groups perceive the status hierarchy to be in conflict with principles of justice and equality. Perceived illegitimacy purportedly increases the comparability of different

status groups, and thereby implies some underlying dimension of similarity. The propensity of perceived illegitimacy to bring previously dissimilar groups into similarity motivates Tajfel's assertion that the perceived illegitimacy of an intergroup relationship is socially and psychologically the acceptable lever for social action and social change (Tajfel, 1978b).

Thus, the interaction between the perceived stability and legitimacy of a system of differentials is important in determining security of social identity. Tajfel (1981) notes that an unstable system of social divisions is more likely to be perceived as illegitimate than a stable one, and conversely, a system perceived as illegitimate will contain the beginnings of instability. Consequently, insecure social identity is more likely to be linked with perceived illegitimacy and instability of social divisions. On the other hand, stability and legitimacy bears closer association with a secure social identity.

2.6.2 Intergroup Behaviour

Using the above theoretical framework, Tajfel (1978b) formulates a number of predictions regarding intergroup behaviour. These may be presented in the following 2x2 cell typology:

	HIGH STATUS	LOW STATUS
SECURE SOCIAL IDENTITY	A	B
INSECURE SOCIAL IDENTITY	C	D

A: includes consensually superior groups in an intergroup situation where the status relations are perceived to be unchangeable. Tajfel (1981) claims that instances of a completely secure social identity for a high status group is a near "empirical impossibility", since

this form of unchallenged superiority is extremely difficult to maintain. (p278) Consequently, Tajfel does not predict the intergroup behaviour of this group. However, Moscovici and Paicheler (1978) delineate the case of a nomic majority which may be argued to fit this category. They hypothesize that such a group, being sure of its position and having had experience of success, can afford to tolerate the existence of a different group. Turner (1975) has shown that ingroup bias in high status groups decreases when that status is perceived as unalterable. Therefore, it may be predicted that groups in category A will exhibit little ingroup bias.

B: groups in this category have a low status, and this status is viewed as unalterable. Tajfel's predictions concerning the intergroup behaviour of these ingroups vary, depending on whether or nor conditions are conducive to individuals leaving the group.

- i) Conditions conducive to leaving: The typical response is social mobility. There is enough social flexibility to allow the individual to move to a more positively-valued group without there being social sanctions from either the high status group or the low status group. Social mobility involves no serious conflict of moral values. These members tend to hold positive evaluations of the high status group and negative evaluations of their own low status group. In a study of the status relations within nursing, Skevington (1981) found that the leaving low group members attributed more advantages to the outgroup than to the ingroup.
- ii) Conditions not conducive to leaving: In social situations where actual social mobility is not possible, psychological dissociation (mobility) may occur (Tajfel and Turner, 1979). This is



frequently expressed as mental alignment with or preference for the outgroup. Intragroup comparisons with individual members of the group may also be employed as a strategy to enhance self-esteem.

C: Tajfel (1978b; 1981) describes two sets of conditions that can give rise to an insecure social identity in a high status group:

- i) the group's superior status is threatened by a lower status group
- ii) the superior status is based upon principles which embody a contradiction of moral values eg injustice, exploitation or use of military force.

Exit from a high status group is not a common occurrence. However, in situations where the superior status is perceived to be based on unjust advantages, the conflict of values may become so intense that group membership no longer contributes positively to social identity. In other words, group membership may lead to a negative social identity. Where conditions are conducive to leaving, a few members may decide to do so; examples are the hippy movement and bourgeois revolutionaries. The more characteristic response is an intensification of actions aiming to preserve the group's superior position. New ideologies may be created and old ones enhanced in an effort to increase psychological distinctiveness. This defensive distinctiveness is usually accompanied by an increase of intergroup distinctiveness. This has been illustrated in a number of studies (van Knippenberg (1978); Moscovici and Paicheler (1978); Skevington (1981)).

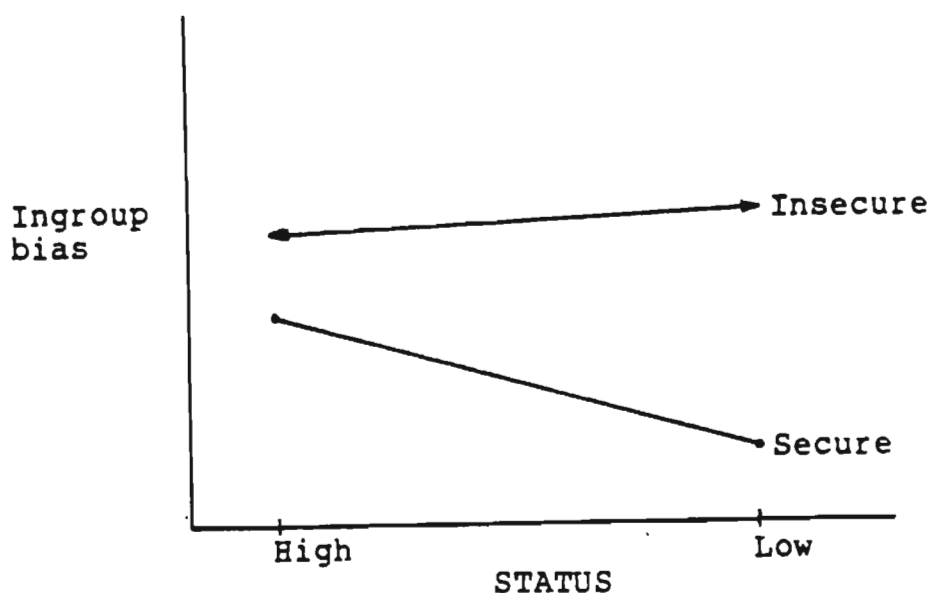
D: The assumption made here is that once low status groups perceive the status hierarchy to be changeable, the problems associated with a negative social identity can be solved in one of several ways or a

combination of more than one:

- i) Social creativity: group members seek positive distinctiveness for the ingroup by redefining some existing group characteristics. Strategies utilized include:
  - a) re-evaluation of the values assigned to the attributes of the ingroup such that comparisons which are negative are now perceived as positive. As an example, Tajfel (1978b) refers to the psychological changes that occurred among American blacks as a result of the 'Black is Beautiful' movement.
  - b) revival of past traditions and events such that they are given a new positive significance. Tajfel (1981) quotes some examples in the domain of language, two of which are the attempt to revitalize the use of Welsh and the rapid spread of Hebrew among Jews.
  - c) the creation of new group characteristics which have a positively-valued distinctiveness from the superior group. Examples of this strategy are often found in the development of new nationalisms (Tajfel, 1981).
- ii) Social Action: includes various tactics which may be used in an attempt to change the social order eg. political protest, strikes and revolution.

These groups characteristically display strong ingroup bias, emerging from assertive distinctiveness (Branthwaite and Jones, 1975; Lemaine, Kasterztein and Personnaz, 1978).

Tajfel's predictions of intergroup behaviour under various conditions of status and security of social identity may be represented graphically as follows:



## 2.7 Overview

Two brief points can be made about the theoretical outlines presented by Tajfel (1978b) and Tajfel and Turner (1979) in a general description of intergroup processes. The first point is best expressed by Caddick (1982):

"it is an approach which breaks free of the extrapolations from interpersonal to intergroup behaviour characteristic of much of the earlier work, and which takes greater cognizance of the social setting out of which intergroup behaviour develops."  
(in Tajfel, 1982, p137)

The second is that it combines both cognitive and motivational principles in its explanation of the social psychological correlates of intergroup relations. These features of the theory have contributed to its pervasive capacity to explain and predict intergroup phenomena (van Knippenberg, 1984).

Nevertheless, there are a number of criticisms which may be levelled at Social Identity theory. Finchilescu (1981) suggests that most of

them pertain to Tajfel's formulation of the social categorization, social identity and social comparison processes.

Tajfel's (1978b) definition of social categorization does not fully account for the influence of ideological and societal forces in the genesis of social categories. Categories are the products of social activity in specific historical contexts, rather than an expression of individual perception (Billig, 1976). "Social categories are in themselves linguistic structures" which are used as cognitive tools to structure the environment (Billig, 1976, p326). Evidence from anthropological studies cited in Billig (1976), has suggested that the use and acceptance of a social label is in itself a subject worthy of investigation (example Moerman's 1965 and 1968 studies on ethnic identification). Category labels are not always logical outgrowths of reality, but are also expressions of the ideological consciousness of a social order. Consequently, Billig (1976) emphasizes the need to focus on the role of ideology and the way in which it is effected through the medium of language, in order to explain the significance of social categories and their relationships with subjective identification.

The factors determining subjective identification with a group remain largely unspecified within the theory. Tajfel's formulation of subjective group identity does not give full significance to the complex dialectical nature of social group identification. Within social identity theory, the process of social identification is largely subsumed under the concept of social categorization. Again, Billig (1976) is the most discursive on this issue. He indicates that:

"the social group ... is an active agent ensuring that identification takes place and transforms

the individual. It is not just a matter of the individual passively receiving the object of his identification into his subjective consciousness."  
(p323)

Zavalloni's (1975) research demonstrated that it is possible for a person to identify him/herself with a group, associate certain traits with the group and yet not see him/herself as possessing these traits. Breakwell (1978) distinguishes between the external and internal criteria of group membership. External criteria are the objective standards of membership which need to be fulfilled in order to become part of a group. The individual's perceptions, beliefs and knowledge about group membership are seen as the internal criteria. Breakwell (1978) postulates that social identity is a process of resolution between these two types of criteria. In a similar vein, Condor (unpublished) points out that Tajfel and Turner's (1979) conceptualization of social identity does not consider the part played by the individual's perception of a social category. "Naturally," she says, "one's perception and evaluation of the group will shape one's self-concept" and "it may even determine whether one chooses to identify with the particular group." (Condor, unpublished; p12).

Important too, are the points made by Rosenberg and Kaplan (1982) concerning the relationship among the elements of social identity. Based on the recognition that the self-concept contains multiple group memberships, they raise the possibility that the effects of some elements may be counteracted by the effects of others. This suggestion is not without empirical roots. Earlier on, Deschamps and Doise (1978) found that the introduction of crossed category memberships can have a diminishing effect on intergroup discrimination.

Notwithstanding the specifics of the above formulations, it is clear that the relationship between group members and self-identity is

complex. A recent study of lesbian identities attests the complex nature of social group identification (Kitzinger and Stainton Rogers, 1985). The results of semi-structured interviews with a sample of forty-one self-defined lesbian women yielded seven differentiable accounts of lesbian identity. Thus, although people may define themselves as belonging to the same category, the sets of meanings they ascribe to this identification may differ substantially. The social identity component of Tajfel's theoretical framework is therefore, in need of greater clarification and development.

The way in which the social comparison process operates is not clearly formulated by Tajfel. The theory states that if comparison is to occur, the outgroup must be perceived of as a relevant comparison group and, also, the dimension of comparison must be recognised and shared by both comparison groups. Tajfel and Turner (1979) suggest that the relevance of the comparison group is determined by similarity, proximity and situational salience. Experimental findings have indicated that these variables are important (Turner, 1978b; Doise and Sinclair, 1973). However, no attempt has been made to integrate these variables with ideological factors as they relate to the objective positions of groups in the real world. As Walker and Pettigrew (1984) point out the value of Social Identity theory is restrained by the problems of predicting the referent people will use for comparison. Most applications of the theory have relied on post hoc, accounts of the comparison process (an example is Cairns' (1982) explanation of intergroup conflict in Northern Ireland). It is clear that this aspect of the theory requires further development for as Walker and Pettigrew (1984) emphasize "a theory must predict" (p308).

One of the reasons being the increasing popularity of Social Identity

theory in the study of intergroup processes (see Brown, 1984), is its capacity to account for the dynamics of social change. Intergroup relations is seen as a dynamic process motivated by the need to achieve positive distinctiveness for the ingroup. Other important determinants of changes in intergroup attitudes and behaviour are the perceived legitimacy and stability of the relations between groups. Whenever there is some dimension of inequality, there will be pressure to change the value of that dimension or to alter the particular dimension of comparison. Billig (1976), however, raises the possibility that under certain conditions the processes of "dimension of comparison change" and "value of comparison change" may operate as measures of social control rather than as general processes of social change. He cautions against the overemphasis of this aspect of change as it might lead to the conclusion that any subordinate group may be kept happy by a mere manipulation in ideology. Hence, the desire to achieve a positive social identity must not be seen in isolation from the social context and ideology.

Tajfel (1978b) has also been criticised for the assumption that ingroup favouritism is inevitable in any intergroup situation. In a recent journal article, Billig (1985) labelled this trend "theoretical fatalism". This fatalistic attitude to prejudice is epitomized in Tajfel's (1981) comment that "there is no easy way to deal with prejudice in its manifold varieties, and all one can hope for is that its more vicious and inhuman forms can be made less acute sooner or later" (p141). As early as 1976, Billig cautioned against a theoretical backsliding into a "generic room" of ingroup favouritism. He stressed that the desire to achieve positive distinctiveness must be seen in relation to the superstructure of a society, rather than as a product of individual psychological processes. To some extent Tajfel avoids this pitfall by taking

into account the importance of social comparison processes. More recently, Billig (1985) tried to counteract the assumption of the inevitability of prejudice by calling attention to the process of particularization. The latter refers to the process whereby a particular stimulus is distinguished from a general category. Thus, for every process of categorization, there is an opposing process of particularization which focusses on stimuli that are different from the category. Billig (1985) is optimistic that this process can be exploited in the opposition to prejudice. He proposes that any occurrence of prejudice is potentially contestable by an argument based on particularization. This criterion, although hopeful, remains to be tested empirically.

The label "theoretical fatalism" may not be entirely accurate in its description of Social Identity theory in that the hypothesis of positive distinctiveness does not inevitably result in intergroup discrimination. An experiment by Mummendy and Schreiber (1984) showed that in a situation where subjects are given a choice of dimensions, the ingroup favoured on dimensions relevant for the ingroup while the outgroup is simultaneously favoured on other dimensions. Thus, positive distinctiveness can be achieved by strategies other than discrimination. Van Knippenberg (1984) also indicated that intergroup behaviour is not simply a reflection of a desire to represent the ingroup favourably vis-à-vis the outgroup. Often, far more complex strategies are used so that a positive ingroup identity does not always mean denigration of the outgroup.

The foregoing discussion serves as an illustration of the complexity of the relation between the processes of social categorization, social identity and social comparison. Social Identity Theory has not emerged entirely unscathed from the various theoretical and empirical attacks levelled against it (Brown, 1984). Many of the concepts central to the



theory are in need of refinement and clarification. This can only be achieved by ongoing research efforts.

## CHAPTER 3

### RATIONALE

Questions concerning the characteristics and antecedents of the way groups view and respond to one another, are of both theoretical and practical significance. It is important in terms of theoretical vitality that Social Identity theory is able to offer powerful conceptual tools in the understanding and prediction of intergroup perceptions and behaviour, as the value of any social psychological theory lies in its power of explanation and prediction. On a social level, it is important that insights from social psychology prove fruitful in the understanding of such problems as intergroup conflict and discrimination. Identifying the important variables in the development and perpetuation of such behaviour, may have implications for social policies which attempt to improve relations between various groups.

#### 3.1 The Importance of Status, Stability and Legitimacy in Intergroup Behaviour

At the centre of Social Identity theory is a focus on the importance of social group differentials in the definition and change of intergroup relations. Two trends of research have developed out of the importance attributed to differences in status. They concern the effects of status on intergroup attitudes and behaviour, and the role played in intergroup behaviour by the perceived legitimacy and/or stability of the social stratification.

Tajfel (1978b) originally proposed that the effects of status differences on ingroup bias differ according to whether cognitive alternatives to the existing social order are available or not. In the

previous chapter, an attempt was made to show how both the variables, perceived stability and legitimacy, contribute to the creation of cognitive alternatives. In predicting the intergroup behaviour for high and low status groups, Tajfel (1978b) incorporates these variables in the notion of security of social identity. Briefly restated, stability and legitimacy are linked to a secure social identity, while illegitimacy and instability are associated with insecure social identity. Generally, the predicted direction of ingroup bias shows an increase where social comparisons are insecure.

### **3.1.1 Explicit experimental manipulations**

It has been acknowledged that an experimental study undertaken by Turner and Brown (1978) stands as the major test of Tajfel's predictions for intergroup behaviour. The variables status (high versus low), legitimacy (legitimate versus illegitimate) and stability (stable versus unstable) were manipulated in a three factor design which provided the opportunity to monitor the effects of each of these variables, interactively and individually. Turner and Brown (1978) made use of an existing social category by recruiting an equal number of Arts and Science students. The experiment was conducted in separate sessions of three subjects each. They were ostensibly participating in an investigation into reasoning skills.

The status variable was introduced by giving subjects prior information that one category (Arts or Science) generally performed better on the task. This status difference was either presented as fair and reasonable or unfair and unreasonable. Finally, subjects were informed that these differences were either certain or open to change.

Various dependent measures were included to trace the effects of the

manipulations. After the discussion task, subjects were required to evaluate the relative performance of their own and another group on rating scales and matrices. They also described the ingroup and outgroup on a series of personality traits. Another measure consisted of subjects' suggestions of alternative ways to assess reasoning skills and additional factors which might influence overall intellectual ability.

The manipulations produced complex findings which have generally been interpreted as support for Tajfel's predictions. High status groups displayed more ingroup bias than low status groups, supporting Turner and Brown's (1978) contention that low status per se is not sufficient to enhance the need for positive differentiation. Secondly, illegitimate groups discriminated more than legitimate groups, irrespective of the group status. This effect was carried through in the group creativity measures. Illegitimate high and low status subjects both displayed a heightened tendency to suggest other dimensions of comparison. The findings concerning the effects of stability/instability were less clear-cut. Perceived instability was found to increase ingroup bias for legitimate high status groups and illegitimate low status groups, but had the reverse effect for illegitimate high status groups. Again, this pattern was repeated on the creativity measures. Amongst both legitimate high status and illegitimate low status groups more suggestions were made.

Caddick (1982) pursued the issue of perceived legitimacy by trying to discern its effect in isolation from stability variables. A careful examination of Social Identity theory enabled him to distinguish four possible roles of perceived legitimacy in intergroup relations:

- i) an 'awareness' role:- Tajfel (1978b) proposed that it is via

perceptions of illegitimacy that groups become salient to one another for comparison purposes,

- ii) an 'insight' role:- perceived illegitimacy is instrumental in the realization that the group's position on the status hierarchy is not the only one possible,
- iii) a 'motivational' role:- the perception that the status relations are illegitimate motivates activity toward social change, and
- iv) an 'ideological' role:- this refers to the potential of perceived illegitimacy to become a crucial element in the struggle for 'justice' and 'equity' .

Thus, it is clear that illegitimacy is not a simple term. An experiment, basically similar to that of Turner and Brown (1978), was devised to further elucidate the impact of perceived illegitimacy. In this case, however, Caddick (1982) sharpened the manipulation by attributing the illegitimate disadvantage of one group to the actions of the advantaged group. Subjects were also given the opportunity to rate the groups on two sets of scales which were either relevant or irrelevant to task performance.

Overall, the reported trends are in line with Tajfel's predictions concerning illegitimate status differentiations. Illegitimate groups showed greater ingroup bias than legitimate groups. However, there is one important difference between Caddick's findings and the results of the Turner and Brown (1978) experiment. The illegitimate superiors in the former experiment displayed strategies which seemingly maintained their status position, while comparable groups in Turner and Brown's (1978) study showed an opposite trend. Caddick (1982) maintains that this difference in results stems from the difference in the manipulation whereby the illegitimate superiors were made responsible for the disadvantaged position of the other group. These subjects

then defended their actions be reaffirming their superiority.

In trying to understand the source of the differences in the results of these studies. Caddick (1982) suggests that the responses of illegitimate groups in Turner and Brown's (1978) experiment, may best be explained by principles derived from equity theory (Walster et al, 1973). In contrast to Social Identity theory which maintains that social comparison motivates the need for positive distinctiveness, equity theory assumes that groups will compare themselves to ensure equity between groups. The basic hypothesis is that the perception of injustice or unfairness creates feelings of distress. This, in turn, motivates the individual to restore equity either psychologically or behaviourally. Applied to Turner and Brown's (1978) findings, this would imply that illegitimate groups, feeling distressed by the perception of unfairness, attempted to restore equity by suggesting alternatives to the comparison dimension.

This interpretation, while seemingly plausible, should not be accepted without some reserve. As Caddick (1982) acknowledges, equity theory is essentially concerned with the interactions between individuals and small groups. Thus, a direct transposition of equity theory concepts to the relations between social groups, would be to ignore the problems associated with extrapolations from interpersonal to intergroup modes of explanation. Consequently, if elements of equity theory are of potential use in the explanation of intergroup processes, then they need to be redefined in the context of the social structure and ideology to ensure that there is no backsliding into reductionism.

Caddick (1982) does, however, accept that Tajfel's theory could be expanded so as to become more comprehensive in its predictions for

illegitimately placed groups. The question he addresses is how can Social Identity theory be altered to include the possibility of pro-outgroup action by an illegitimately high status group. To some extent, Tajfel (1978b) does account for this pattern of intergroup behaviour. He describes an intergroup situation where the superior status of a group may be intensely related to a conflict of values, such that any positive contribution to social identity is destroyed. Consequently, no discrimination or hostility against the outgroup will be displayed. However, Tajfel (1978b) does not develop this prediction any further, since he maintains that "this is hardly an interesting intergroup prediction" (p 90). Caddick (1982) suggests that a sideways glance at theories like equity theory, may be helpful in extending our understanding of such problems of group behaviour. More specifically, it is proposed that concepts like psychological equity restoration are open to being conceptualized in social identity terms.

Commins and Lockwood (1979) investigated the hypothesis that under conditions of differential favour, groups will seek to maintain positive distinctiveness rather than attempt to restore equity. Using the minimal group paradigm (Tajfel et al, 1971), relative position on the dimension of comparison was manipulated by either awarding a bonus of 25 points or subtracting 25 points at the outset of the experiment. The researchers indicate that the arbitrary nature of the favoured position renders it illegitimate. Three conditions were analysed: ingroup favour, outgroup favour and a control condition of equality. The results supported the social identity hypothesis. Instead of acting in terms of equity norms, subjects in the control condition displayed significant ingroup bias. In the outgroup favour condition the degree of bias was in excess of that needed to restore

equity. The principles of equity would predict outgroup bias in the ingroup favour condition. Contrarily, ingroup bias was found, although the degree was less than for the other two conditions. Commins and Lockwood (1979) report that the latter trend confirms Tajfel's (1978b) hypothesis that an illegitimate advantage will reduce ingroup bias to the extent that there is a concomitant reduction in the positive value of group membership. Consequently, it would seem that Social Identity theory is capable of explaining the variations in ingroup bias to a greater extent than equity theory. Hence, the observation by van Knippenberg (1984) that social identity theory has a pervasive capacity to predict intergroup behaviour, is not unjustified. No doubt, further development of the theory will expand its predictive capacity.

Brown and Ross (1982) stress that the dynamic and reciprocal aspects of intergroup relations should be accommodated for in the design of group experiments. These researchers criticize the experiments by Turner and Brown (1978) and Caddick (1982) for their exclusive focus on the static features of group behaviour (that is, variables are measured at a fixed point in time) and their neglect of the reciprocity of intergroup behaviour. In an attempt to redress this empirical shortcoming, Brown and Ross (1982) manipulated the variables status and threat to identity to investigate the changes in identity over a period of intergroup interaction.

A status differential was introduced in the relations between two minimal anonymous groups of schoolchildren. This was achieved by assigning them two versions of a reasoning ability task which differed in the relative degree of difficulty. The reciprocal nature of the intergroup situation was ensured by giving the groups information as to how they were perceived by the outgroup. The feedback was not a



reflection of the actual opinions of the outgroup; each opinion was allocated by the experimenters so as to form three levels of threat to identity; high threat, moderate threat and low threat. Various measures of ingroup bias and affective orientation towards own and other group were administered both before and after communication from the outgroup.

The message conveyed by the results confirms the hypothesis that people are motivated to seek a means of defining themselves positively. In the conditions of high threat where the communication from the outgroup deprived ingroup members with such a means to a positive social identity, both the high status and low status groups displayed a shift in intergroup behaviour. On both the affective measures - liking for the outgroup and annoyance with them - there was a significant shift towards a negative orientation, irrespective of the status of the group. However, ingroup bias only changes significantly in the case of the low status group. The direction of bias changes such that the outgroup bias displayed before outgroup feedback was transformed into a bias in favour of the ingroup. The experimenters explain the high status indifferences as measures of ingroup bias in terms of the presence of a sizeable minority in these groups who rejected the status differentiation. This interpretation coincides with the predictions of Social Identity theory.

In a similar vein to the Turner and Brown (1978) experiment, the high status groups attached more importance to the possibility of alternative comparative dimensions. Brown and Ross (1982) concede that this pattern is not excluded by the theory, although Tajfel (1978b) predicts that this likelihood is remote. In conclusion they indicate that social identity theory does have some problems in predicting which strategies are most probable in any particular

situation.

The studies reviewed thus far, are representative of the experimental literature; the aim of which has been to monitor the effects of status, legitimacy and stability under controlled conditions. A basic similarity within these studies is that the concepts were all operationalized as ahistorical, static independent variables, which have a simple linear relationship to certain dependent variables (Brown and Ross, 1984). Variables such as status, perceived legitimacy and stability have typically been imposed on ad hoc, arbitrary groups by the use of instructions or contrived information. By contrast, the relations between social groups in realistic situations are submerged within particular historical, economic and other forces. As Hewstone and Giles (1984) point out theoretically relevant variables are rarely found in pure form.

This is not to deny the valuable contribution made by controlled laboratory studies. Theoretical progress is difficult to accomplish in the absence of the precision afforded by the experimental method. As a whole, the studies reviewed have established the importance of perceived illegitimacy and instability in mediating the attitudes and behaviour of different status groups. Group behaviour is not simply a reflection of the subject's desire for a positive social identity. Variations in patterns of intergroup behaviour can be expected to the extent that the status differential between groups is perceived as stable/unstable or legitimate/illegitimate.

The problem arises when making generalizations from research with ad hoc groups to real-life intergroup situations where group memberships form an existing part of social identity. While studies of the former type allow for confident interpretations about the effects of

manipulations, extrapolations to the wider social context tend to be simplistic and naive (Tajfel, 1972). The nature of social psychology demands that the relevance of theoretical concepts for real-life situations be tested. Hewstone and Giles (1984) have stated that success in naturalistic research is "the litmus test of our discipline's achievements." (p292). With regard to investigations on the issue of social differentials and perceptions thereof, there has been an imbalance of emphasis with a greater leaning towards more controlled experimental settings. Recently, many researchers have called attention to the need for more studies which use theoretical concepts to grapple with the problems of relations between realistic groups, and in doing so, take account of the complexity of the processes in which these relations are embedded. (Brown and Ross, 1984; Hewstone and Giles, 1984). An inspection of past research reveals that there are some studies which incline towards a more naturalistic approach. A review of those pertaining to the importance of status, legitimacy and stability in intergroup behaviour, is the concern of the following section.

### 3.1.2 Research on Realistic Social Differentiations

Branthwaite and Jones (1975) tested the relevance of the minimal group findings in an intergroup situation involving real social differences. University students who unequivocally categorized themselves as either English or Welsh were included as subjects. Following the method of Tajfel et al (1971), a matrix task was used as a measure of intergroup discrimination. Based on the belief that strategies of differentiation may depend on the status of in- and outgroups, the researchers hypothesized that in a realistic social situation the fairness strategy might operate to inhibit the expression of discrimination.

Looking at the results as a whole, about one-third of the subjects chose a fairness strategy when given the opportunity of allocating equal rewards to both groups. Compared with the 18 percent reported in the study by Tajfel et al (1971), the tendency to fair behaviour appears to be greater in this realistic group sample. Differences in discrimination were found for Welsh and English subjects. The Welsh displayed more discrimination against the outgroup, while discrimination in favour of the outgroup was more common among the English. Contrastingly, in situations where rewards were distributed between members of the same groups, no difference in discrimination between Welsh and English was found. Braithwaite and Jones (1975) interpreted the differences in patterns of discrimination in terms of the status differentiation between Welsh and English. A discussion of the experiment with subjects revealed that the awareness of the conflicting interests between the groups was strongest in the low status, Welsh subjects. The findings of this research suggest that this effect may be characteristic of groups of differential status.

An extensive field study by van Knippenberg (1978) showed some support for the tendency among low status groups to attribute greater significance to the dimensions of differentiation. The sample for this study was drawn from two types of Dutch technical colleges between which there existed clear-cut and acknowledged status differences. Group descriptions and evaluations of characteristics constituted the dependent variable. It was found that intergroup characteristics such as status was evaluated more highly by the low status group.

The applicability of Tajfel's social identity theory (1978) was tested more directly by Skevington (1980) in the context of changing social relations between high and low status trainee nursing groups. It was found that both groups attributed more advantages to the high status

group, thus confirming the existence of a consensual status differentiation. Substantive differences between high and low status groups were found in terms of the degree of identification with the ingroup. In the high status group self and ingroup ratings on nursing-relevant characteristics, were almost identical indicating a highly positive social identification. Contrarily, in the low status group ingroup and self-ratings differed significantly from each other. These results indicate a less positive social identity in the low status group relative to the high status group thus confirming Tajfel's (1978) theoretical predictions. The extent of the dissatisfaction with the low group status is expressed in the finding that more than fifty percent of this group seek change, either at the group or individual level. Of theoretical significance is the finding that potential low status leavers attributed many more disadvantages to the ingroup than non-leavers. The leavers also attributed more advantages to the outgroup they wished to join.

Unlike the findings reported thus far, two other trends displayed in the nursing sample did not show absolute support for the assertions of social identity theory. No evidence emerged to indicate that perceived illegitimacy was greater in the low status group. Secondly, conditions of explicit comparison decreased rather than increased differentiation between the groups. Skevington (1980) points out that the experimental evidence for the claim that intergroup comparisons enhance differentiation were derived from artificial laboratory-type situations. An important difference between this and a realistic intergroup setting is the existence of regular contact and experience. For example, the findings of the minimal group studies and the study by Doise and Sinclair (1973) were specific to a situation where intergroup contact was largely absent. Therefore, the relevance of controlled

laboratory studies to situations of intergroup conflict is quite tenuous. The author suggests that the findings of the nursing study is more likely to be applicable to other naturalistic settings. With regard to the concept of legitimacy, it is suggested that investigation of the impact of illegitimacy in the development and course of social change, may reveal that the perception of unfairness is only necessary in triggering the process of change.

Data from a study by Bourhis and Hill (1982) show trends similar to that obtained by Skevington (1980). Concepts derived from Tajfel's social identity theory (1978) were used to examine the intergroup relations between the lecturing staff of a British university and polytechnic. The status relationship between university lecturers (high status) and polytechnic lecturers (low status) as well as their perceptions concerning the legitimacy and stability of the situation, were found to have an effect on patterns of intergroup differentiation and bias. In line with Skevington's (1980) findings, fewer low status lecturers identified themselves positively than high status lecturers. In addition, those polytechnic lecturers who indicated a desire to move into the university sector expressed greater dissatisfaction with conditions than polytechnic lecturers who had no desire to move. Attitudes towards the system of stratification between the two types of institutions differed significantly according to the status of the subject. Ninety-six percent of the high status group as compared with only forty-eight percent of the low status group were satisfied with the status quo. University lecturers perceived their high-status position as legitimate and fair while numerous polytechnic lecturers saw the status relationship to be illegitimate and unfair. Both groups believed that the intergroup relationship was capable of change in the future.

Measures of intergroup bias produced interesting trends. When using salary measures to decide on appropriate pay awards to each group, the predominant strategy employed by both groups was that of fairness. This finding seems to support the hypothesis by Braithwaite and Jones (1975) that in realistic social situations the norm of fairness might operate to inhibit the expression of discriminatory behaviour. However, when using a different measure, namely distribution of education cuts, each group preferred to cut the outgroup more than the ingroup. This effect was maintained in the intergroup patterns obtained from an intergroup bias questionnaire. On each of the dimensions the university lecturers accentuated the inferiority of the polytechnic lecturers who, in turn, exaggerated the advantages of the university staff.

Bourhis and Hill (1982) report that the results of this field study are encouraging, since they signify the applicability of Tajfel's theoretical concepts to complex intergroup situations. These researchers join Skevington (1984), Tajfel (1982) and Hewstone and Giles (1984) in calling for further testing of the propositions of social identity theory in a variety of social settings. Bourhis and Hill (1982) propose that such studies have a crucial role to play "in extending the range of 'natural' social processes to which social psychological theory can be applied" (p464).

### **3.2 Race Relations in South Africa**

The race situation in South Africa constitutes a suitable field setting for further testing of the applicability of Tajfel's theoretical predictions to real life intergroup situations.

### 3.2.1 Group Differentiation and Identification in South Africa

South Africa is a highly stratified society which is characterized by institutionalized separation between race groups. Race is the predominant criterion along which social categorization takes place. The Apartheid legislation system ensures that all persons living in South Africa are classified in terms of one of four racial categories : whites, coloureds, blacks and Indians. This system of stratification is entrenched within all aspects of life:- economically, socially, politically and constitutionally. Consequently, one's racial designation determines where one lives, works, socializes etc.

Race is an example of an ascriptive social category in which external physical characteristics are of primary importance in conferring membership on individuals. On the basis of these physical characteristics, the individual is exposed to certain types of social experiences. In a society like South Africa where divisions are deep-seated, the way in which people perceive one another is likely to be determined by their respective race groups. The latest Human Sciences Research Council (HSRC) report on Intergroup Relations (1985) has indicated that population group or racial categorization are first-order interpretations in terms of which the actions and behaviour of self and others are perceived. Thus, although there are differences within racial categories along dimensions such as language, cultural heritage, tribal and religious affiliations, the racial division assumes a greater importance than any subgroup. The empirical research conducted under the auspices of the HSRC has shown that for white South Africans a white group consciousness is stronger than the affiliations to language or religious subgroups. Similarly, within the 'African' population the trend is towards active identification with an inclusive black group over and above tribal and language affiliations. The rise



of the Black Consciousness movement in the seventies, with its emphasis on a unified black identity, is evidence of the pattern of identification amongst blacks.

### 3.2.2 Existing Status Relations

Race group differentials constitute the cornerstone of the socio-political and economic structure of South Africa. Whites are responsible for the institutionalization of a system of segregation in terms of which they are accorded numerous advantages in all spheres of life. Blacks are discriminated against in terms of being deprived of political rights, limitations on education, residential rights in certain areas and social segregation. Van den Berghe (1962) noted that skin colour is by far the most important determinant of status and rights. Whites are at the apex of the system of stratification, with all other groups having subordinate status (Lever, 1978).

The value differentials attached to race are clearly revealed by the stereotypes ascribed to blacks - inferior intelligence, emotional and moral weakness, laziness, lack of cleanliness etc. Central to the existing socio-political structure is "an historical ethnocentrism that implies that white culture is superior and that blacks should try to imitate it" (Gilbert, 1980 : p. 22). Ritchie (1973) distinguishes highly ethnocentric societies by the following criteria :

- widespread occupation with social distance
- sharp definitions of group membership
- strongly delineated economic, religious or political ideologies.

The intergroup situation in South Africa would appear to conform to the above criteria. The Apartheid legislation is based on strongly delineated economic, religious and political ideologies; it is concerned with maintaining social distance between the race groups and

it attempts to formulate sharp definitions of race group membership.

### 3.2.3 Movements toward Social Change

Since August 1985 all major South African black townships have experienced mass rioting, demonstrations and boycotts. The severity of the violence prompted defensive action by the state which climaxed in the declaration of a 'state of emergency' in all major centres around the country. A survey conducted by the Women for Peace organisation among a sample of blacks in the Rand townships showed that 44 percent of the sample perceived the discriminatory laws as the cause of rioting; a further 31 percent identified inferior education as the causal factor, another 20 percent believed that black exclusion from decision-making motivated the riots and finally, 20 percent saw police harassment as having a causal role in the escalating violence. (Reported in The Sunday Times 13 October 1985). These results clearly indicate that blacks are dissatisfied with the present system of social stratification. This dissatisfaction is perceived to be the cause of the violence in the townships. In their latest publication (1985), the working committee of the HSRC acknowledged that the existing system of race classification is the root cause of conflict between groups in South Africa. The escalating violence is a manifestation of blacks' rejection of the status quo accompanied by a firm desire for social change.

An increasing percentage of the white racial group, are expressing attitudes aimed at a rejection of the statutory division of people into categories for which there is hardly any social justification. Evidence of this is the proliferation of white groups established out of concern for the interracial conflict. Examples are Women for Peace, Let's Talk Now and the National Convention Movement. A survey

conducted by the London Times in August 1985 revealed that 36 percent of the whites interviewed are unhappy with the Apartheid system. The finding that a majority of whites expect Apartheid to end within the next ten years indicates a generalized perception of instability with regard to the status relations (Reported in The Sunday Tribune, 1 September 1985). A subsequent survey by Mark en Meningopnames supported these findings. Two-thirds of the whites interviewed believed that power-sharing is inevitable and as many as 37 percent believed that change is not proceeding fast enough (Reported in The Natal Mercury, 25 November 1985).

However, the trend among whites to reject Apartheid is accompanied by another, less optimistic tendency for groups of whites to adopt strategies of defensive distinctiveness. This is manifested in the rapid increase in membership reported by the leaders of political parties such as Die Herstigte Nasionale Party, The Conservative Party, and Die Afrikaner Weerstandsbeweging. Thus, it can be seen that the social action on the part of blacks has increasingly threatened the superior status of whites resulting in one of two strategies; defensive distinctiveness or a rejection of the system of stratification by members of the white group.

The changing context of the relations between groups in South Africa represents a crucial area for further social psychological investigation. The studies reviewed thus far indicate that psychological variables may explain many areas of intergroup behaviour, although these must be seen against the wider contexts of the social structure. To quote Tajfel (1982) "the psychological study of (intergroup) problems is one of our most important tasks for the future."

### 3.3 Aims of the Present Study

The present study represents an attempt to investigate the impact of status, perceived legitimacy/illegitimacy and perceived stability/instability on intergroup bias in a real-life intergroup situation between blacks\* and whites in South Africa.

Status, legitimacy and stability are concepts derived from Tajfel's social identity theory of intergroup relations (1978). Applied to the South African intergroup setting, they may be defined as follows :

- i) status:- refers to the relative position of the race group on some evaluative dimension of comparison as perceived by the members of that group. A country-wide investigation into perceived quality of life demonstrated that comparison of one's own group with other racial groups is a vital contributory factor in the evaluation of the quality of life (HSRC Report on Intergroup Relations 1985). The same study revealed that there is a wide gap between blacks and whites in terms of their perceived satisfaction with life. A majority of blacks described themselves as dissatisfied with the quality of their lives. This would suggest that blacks occupy a position of low status relative to whites.
- ii) legitimacy/illegitimacy:- is the perception by one or other race group that the principles along which stratification is based, are either fair and just (legitimate) or unfair and unjust (illegitimate).

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\* Although the author accepts the use of the term blacks to describe all racial groups oppressed under the Apartheid legislation, for the purposes of this study blacks are those persons commonly designated as 'Africans'.

iii) stability/instability:- of importance here is the absence or presence of an awareness that in a number of years' time the relative status position of the race groups may be changed or altered.

Intergroup bias constituted the dependent measure. For the purposes of this study intergroup bias included (1) ingroup bias - the tendency to favour one's own race group over members of the other race group on rating and allocation tasks; (2) outgroup bias - the tendency to favour the race group to which one is a member and (3) fairness - an absence of either of the above strategies.

Considerations of both the theory and intergroup context generated the following hypotheses :

- a) the variation in intergroup bias will be significantly explained by an interaction between the three factors status, legitimacy and stability.
- b) status and legitimacy will have an interactive effect on intergroup bias, with perceived illegitimacy producing stronger ingroup bias than perceived legitimacy in both high and low status conditions. However, in the high status group perceived illegitimacy may also produce an opposite effect where the direction of bias may be reversed in favour of the outgroup.
- c) stability and legitimacy will interactively influence the pattern of intergroup bias such that conditions of perceived stability and legitimacy (high and low status) will be associated with less ingroup bias than perceived instability and illegitimacy.
- d) stability and status : perceived instability as compared with perceived stability will enhance the direction of bias in both high and low status groups.

## CHAPTER 4

### METHOD

#### 4.1 Subjects

A total of 369 University of Natal, Durban students participated in this study. Of the total, 208 subjects were exclusively involved in preliminary testing necessary for scale construction. One hundred and sixty-one students participated in the principle stage of the study. Each of these 161 students had responded to bulletin board advertisements (Appendix A) offering R2.00 for taking part in a research project on attitude measurements. No mention of race or intergroup relations was made. The subjects were therefore unaware that race (blacks and whites) was a subject of interest. The data from Indian and 'coloured' volunteer subjects were excluded from the analysis. The remaining sample comprised 70 blacks and 70 whites. The sex of the subject was not taken into account as race constituted the social categorization under investigation.

#### 4.2 Measures

##### 4.2.1 Preliminary Testing

Two preliminary tests were conducted in the development of (i) an attitude scale designed to assess perceptions of status, stability and legitimacy, and (ii) a trait evaluation scale.

##### 4.2.1.1 Construction of an Attitude Scale for Black-White Relations

The method of scale construction employed was based on the procedure devised by Likert (1932). A pool of thirty race-relevant items were selected from various attitude scales designed to measure racial prejudice. Examples of the attitude scales from which items were selected are The Anti-Negro Scale, The Anti-Semitism Scale and The

Ethnocentrism Scale (in Shaw and Wright, 1972). The thirty items were compiled into questionnaire form (Appendix B) and then administered to a group of 124 students who were not involved in the main study. Respondents were asked to indicate their reaction to the items by means of a seven-point rating scale ranging from 1 - completely disagree to 7 - completely agree. As a check against the operation of a response set, the meanings of several statements were altered so that agreement with these items meant a rejection of the status differential between blacks and whites: whereas agreement with the other items meant the opposite i.e. support for a status distinction between the race groups.

A factor analysis was performed on the data using the method of principal factoring with iteration (Statistical Package for the Social Sciences Factor programme, 1975). Oblique rotation with the default value set at zero was used as the method of simplifying the factor structure. The oblique solution was employed since it was believed that the three anticipated factors status, stability and legitimacy would be correlated to some extent. Three factors with eigen values greater than 1 emerged. The significant loadings on two of the factors, eigen values and percent of variance accounted for are shown in Table 4-1. The third factor was excluded from further analyses and interpretation, since only two items had significant loadings on this factor with all other items having loadings of .28 and less. Because many items loaded highly on the other factors, a relatively high cut-off point of all loadings above .50 was set.

Table 4-1: Factors with Significant Loadings

Questionnaire Item Number	Factor 1 (Stability x Legitimacy)	Factor 2 (Status x Legitimacy)
5	.57	
6		- .63
7	.69	- .42
8	.78	
9	.54	- .83
11	.56	
14	.60	
15	.66	
16	.62	- .52
20	.75	
23	.82	
25	.50	- .64
26	.58	
28	.56	
30	.55	- .54
Eigen values	9.714	1.688
Percent of Variance	62.9	10.9

Detailed examination of the pattern of significant loadings, content of the items and theoretical insights contributed to the naming of the factors. All items with significant loadings on factor 1 made reference to the stability of the status quo, while items loading on factor 2 directly related to the status differentiation between blacks and whites. Joint loadings on factors 1 and 2 were explained in terms of a common dimension of legitimacy. All the items which loaded significantly on both factors had, in addition to a reference to either stability or status differences, a suggestion of fairness, equality and justice. Hence, the factor names, stability with legitimacy (factor 1) and status with legitimacy (factor 2). All fifteen items with significant loadings as shown in Table 4-1, were included in a questionnaire for use in the main study. The response format



was the same as that used in the preliminary questionnaire i.e. a seven-point Likert scale.

#### 4.2.1.2 Construction of a Trait Evaluation Scale

Subjective ratings of individual group members on a series of evaluative trait scales is widely used as a measure of ingroup bias (cf. Brewer, 1979). For the present study suitable traits were selected from a study by Turner and Brown (1978): mature/immature; responsible/irresponsible; flexible/inflexible; tolerant/intolerant; open-minded/closed-minded; warm/cold and co-operative/unco-operative. To these emotional/unemotional and arrogant/unassuming were added.

Pretesting was carried out to establish whether these pairs of traits were in fact bipolar. Eighty-four students not participating in the main study, completed a questionnaire (Appendix C) designed to measure the perceived favourability of each adjective on a five-point Likert-type scale anchored by 1 - very unfavourable and 5 - very favourable. Dependent Students t-tests were used to analyse the responses. The means, standard deviations and t-statistics are presented in Table 4-2. A significant difference was found in the degree of perceived favourability of each of the adjectives constituting a bipolar pair.

Table 4-2: Favourability Ratings of Bipolar Traits

Source	Mean	S Dev	T Score
<u>Responsible - Irresponsible</u>			
Responsible	4.301	.866	14.562 p < .01
Irresponsible	1.88	1.029	
<u>Open-minded - Closed-minded</u>			
Open-minded	4.169	.824	15.129 p < .01
Closed-minded	1.867	.972	
<u>Flexible - Inflexible</u>			
Flexible	3.747	.947	13.188 p < .01
Inflexible	1.904	.709	
<u>Emotional - Unemotional</u>			
Emotional	3.193	.818	5.56 p < .01
Unemotional	2.518	.902	
<u>Warm - Cold</u>			
Warm	4.05	.84	15.511 p < .01
Cold	1.843	.862	
<u>Mature - Immature</u>			
Mature	3.93	.762	12.92 p < .01
Immature	2	.911	
<u>Unassuming - Arrogant</u>			
Unassuming	3.084	.940	5.65 p < .01
Arrogant	2.048	1.136	
<u>Tolerant - Intolerant</u>			
Tolerant	3.867	.729	12.039 p < .01
Intolerant	1.928	1.033	
<u>Co-operative - Unco-operative</u>			
Co-operative	4.157	.634	13.928 p < .01
Unco-operative	2.024	1.059	

DF = 82 (one-tailed)

Several other measures were adapted from similar studies within the field of social psychology.

#### 4.2.2 Group - Perception Ladder

A ladder rating scale adapted from Cantril's (1965) Self-Anchoring Striving Scale constituted the primary measure of perceptions of the status relations between blacks and whites. The intention behind the inclusion of this measure of status, stability and legitimacy in addition to the attitude scale for black-white relations is that a measure of validity for the ladder scale would be obtained by correlating the attitude scale scores with the data derived from the ladder.

A ladder rating scale was originally used by Cantril (1965) to measure and compare aspirations among different societies. In its original application the top and bottom of the ladder rating were established by asking the subject to define his/her personal aspirations and fears. Thereafter, a number of evaluative questions were asked in relation to the self-defined scale. The ladder is typically used to probe aspirations of past, present and future events. The so-called Self-Anchoring Striving Scale is an instrument which can be used for a variety of problems and across different situations. Jaspars and Finchilescu (personal communication, 1985) initially suggested that it may be suitably adapted to assess intergroup perceptions.

In the present study subjects were presented with a picture of a ladder consisting of rungs labelled from 0 to 10. They were instructed to imagine that the top represents the best possible life they could hope for in South Africa, while the bottom represents the worst possible life imaginable. A series of questions followed which required the subjects to indicate the position of the ingroup and outgroup on the ladder as at the present time, five years ago and five

years hence, relative to their perceptions of the best and worst possible life circumstances in South Africa. Finally, they were asked to imagine an ideal situation in this country where everything is "as it should be", and then to indicate where in such a situation each of the two race groups should be. Order of presentation for blacks and whites was counterbalanced so that half the subjects were required to give ingroup ratings first, while the other half rated the outgroup position first.

#### 4.2.3 Voting Preferences

An adapted version of Festinger's (1947) mock elections for college club presidents were used as a measure of intergroup discrimination. In the original study Catholic and Jewish women voted for candidates who were either members of the same or other religious groups. In the present study subjects were asked to assume that faculty council elections were about to take place. The manifestos of four fictitious candidates were presented. The candidates were all males with two being white and two, black. Race and sex of the candidate was conveyed in the choice of names - Bongani Ntuli, Charles Labuschagne, Roger Dorkin and Peter Ngcobo. Each manifesto contained about five statements. A detailed examination of the Student Representative Council election manifestos (University of Natal, Durban) for 1985, revealed that all candidates typically included promises concerned with accurate representation, hard work, course reform and communication. Therefore, the manifestos used in the study were designed on the basis of the generality and similarity of the statements. As a control for any sequence effects or effects from slight variations in the manifestos, both the order of presentation of candidates and the allocation of manifestos were randomized, resulting in four different presentation formats. Subjects were instructed to read each manifesto and then

indicate their voting choices in order of preference where 1 represented the first choice, 2 - second choice, 3 - third choice and 4 - fourth choice.

The same candidates were to be rated on the series of bipolar traits described in subsection 4.2.2. The name of each candidate appeared above a list of traits. A number of steps were taken to counteract possible response set tendencies. Two lists were drawn up which differed in terms of the sequence of traits. Then, the dimension of favourability was randomized so that some scales ran from favourable to unfavourable while others were reversed. These steps created four different lists of traits. Names of candidates were randomly assigned to trait lists.

#### 4.2.4 Allocation Task

Participants in the study were presented with sketch plans of the room layout on two floors of a student residence block. These rooms were also graded according to their desirability. Three categories of desirability were included ranging from least desirable (1) through more desirable (2) to most desirable (3). The accompanying instructions were:

"Suppose that this residence is made available to students of all race groups. At the beginning of the academic year an equal number of white and black students apply for residence. Imagine that you are given the task of assigning students to rooms. In the case of each room please mark off either W (white) or B (black) on the diagram according to the race of the student to whom you would allocate the room."

This gave the subjects the opportunity to display intergroup bias on a number of dimensions: (1) the relative number of rooms they allocated to each race group, (2) the relative desirability of the rooms they allocated to each race group and (3) the degree of integration tolera-

ted in the allocation of rooms.

Similar behavioural measures involving resource distribution decisions have been commonly used in intergroup studies. Examples are the allocation matrices used in the minimal group studies, Prisoner's Dilemma Game choices and other Zero-Sum Games (cf. Brewer, 1979).

#### 4.3 The Questionnaire (Appendix D)

Four subsections constituted the questionnaire:

- i) Attitude scale for Black-White relations
- ii) Group-Perception Ladder x 2 ingroup-outgroup variations
- iii) Voting Manifestos and Trait Scales x 4 sequence variations
- iv) Room Allocation task.

The sequence of the above subsections was varied by using a Latin-square arrangement (Appendix E). This resulted in 32 sequence variations. Each sequence was used five times giving a total of 160 questionnaires for blacks and whites. An additional forty questionnaires were compiled for distribution to Indian and 'coloured' volunteer subjects. In each case the race of the subject could be identified by the colour of the covering page of the questionnaire. A pink or blue cover denoted a black subject; pink or green, a white subject and a plain white cover was used for both Indians and 'coloureds'. This system of colour coding obviated the need for a biographical details section; a factor which ensured that the subjects would remain completely anonymous.

The cover page was titled "General Attitude Survey". The following general instructions appeared immediately after the title:

"This questionnaire investigates perceptions and attitudes regarding a number of social matters. Please answer all questions as truthfully as possible. There are no right or wrong answers. Your opinion will make a valuable contribution

towards this study, so let your personal views and experience determine your response. Your name will not appear anywhere on this questionnaire, therefore you will remain anonymous. All answers are treated as confidential; the information will be processed by a computer and will come out as general statistics. If you require further information about the questions, please ask.

Thank you for your participation in this study."

#### 4.4 Procedure

On arrival at the advertised venue subjects were seated at individual desks. The study was presented as a general attitude survey consisting of various types of items. Subjects were informed that all the instructions were contained in the questionnaire. These were to be read carefully and all items were to be answered. No communication between subjects was permitted. However, questions could be directed at the experimenter, if there were any ambiguities in the instructions.

The questionnaires were then handed out. Each subject was given a colour-coded questionnaire in accordance with his or her race group as identified by the experimenter. This system worked smoothly since blacks and whites can easily be identified by their physical appearance. In the case of uncertainty, the subject was treated as either 'coloured' or Indian and was therefore excluded from the analysis. The task of distributing certain colour codes to specific race groups was conducted as unobtrusively as possible. The allocation of one of two possible colours for each race group, with the addition of a separate colour for both 'coloureds' and Indians, ensured that the subjects remained unaware of the method used to identify their race group.

As each subject completed the questionnaire they handed it to the experimenter who, after checking that it was in fact filled in, paid

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and thanked the subject. The average time taken to complete the questionnaire was twenty minutes. The data from 161 subjects was collected over a period of two weeks.

#### 4.5 Design and Analysis

The present study is an example of ex post facto research. The independent variables status, stability and legitimacy were studied in retrospect for their effects on the dependent variable. The dependent measure was the degree of ingroup favouritism displayed in (i) voting choices, (ii) trait evaluations, (iii) number of rooms allocated to each group, (iv) relative desirability of the allocated rooms and (v) the degree of integration. Multiple linear regression analysis was the primary statistical method used to investigate the effects of the independent variables on the dependent variables.

#### 4.6 Scoring

##### 4.6.1 Independent Variables

The scores for perceived status, stability and legitimacy were derived from two sources:

##### i) The Group-Perception Ladder

Status: A status score was computed from the subject's ratings of the ingroup and outgroup on the ladder as they were perceived at the present time. The outgroup present rating was subtracted from the ingroup present rating to produce two conditions of perceived status: low status for the ingroup indicated by a negative score or high status indicated by a positive score.

Stability: The score for stability was computed as the quotient obtained by dividing the difference between the future rating of the ingroup and outgroup by the difference between the present



rating of the ingroup and outgroup. The formula is represented below:

$$\text{Perceived Stability} = \frac{\text{Future (Ingroup Rating - Outgroup Rating)}}{\text{Present (Ingroup Rating - Outgroup Rating)}}$$

Perceived instability (a negative or zero quotient) was defined as the perception that in five years the relative status position of the race groups may be reversed or made equivalent. A five year interval was chosen based on the finding by Cantril (1965) that most subjects find a greater time lapse too far away to be predictable.

Legitimacy: The ratings of the position of blacks and whites in an ideal situation produced a legitimacy score. A positive difference between the position of the ingroup and outgroup denoted a perception of legitimacy, while a negative or zero difference score indicated the perceived illegitimacy of the status relations.

#### ii) Attitude Scale for Black-White Relations

For each subject two mean scores were calculated across the aggregate of items constituting each of the factors stability with legitimacy and status with legitimacy. The response scale ranged from 1 to 7, where the higher the score the greater the support for a status differential between blacks and whites. Where the meanings of statements differed with this trend, scoring was reversed.

#### 4.6.2 Dependent Measures

There were several dependent measures. In each case ingroup bias was calculated as a difference score: ingroup rating minus outgroup rating.

i) Voting Preferences

Following the instructions the subject gave a rating of relative preference for each candidate ranging from 1 (first choice) to 4 (fourth/last choice). The mean voting preference for the two ingroup and two outgroup members were computed. Ingroup bias was then calculated as the difference in mean voting preference between the ingroup and outgroup.

ii) Trait Evaluations

Perceptions of ingroup and outgroup candidates were scored from 1 to 7 in terms of their favourability with higher scores indicating a more favourable rating. Where the dimension of favourability had been reversed, scoring was reversed accordingly. Ingroup bias in trait evaluations comprised a difference score obtained by subtracting the mean rating for outgroup candidates from the mean rating for ingroup candidates.

iii) Room Allocation

A total of 20 rooms were to be allocated to either black or white students. Ingroup bias was measured as the difference between the number of rooms allocated to the ingroup and the number of rooms allocated to the outgroup.

iv) Relative Desirability of Rooms

The degree of desirability ranging from 1 - least desirable to 3 - most desirable, was summed over the rooms allocated to the ingroup and the rooms allocated to the outgroup resulting in two weighted scores. A maximum score of 41 was possible in which case all rooms had to be assigned to one group. An equal score for both ingroup and outgroup was not possible, since a maximum

score of 41 meant that one group gained at the expense of the other. The weighted score for the ingroup minus the weighted score for the outgroup yielded the measure of ingroup bias.

v) Degree of Integration

A measure of integration was derived from the distribution of blacks and whites over the two 'floors' of the residence block. A system of scoring was devised (Appendix F) based on the respective race group memberships of the students assigned to neighbouring rooms. Each of the floor plans was divided into 6 pairs of neighbouring rooms. Working a clock-wise direction a score of either 0 (same race) or 1 (different race) was assigned for each pair of neighbours. The sum of these scores over the two floors represented the degree of integration with a higher score representing greater integration.

## CHAPTER 5

### RESULTS

#### 5.1 Validity Check

Pearson product moment correlations were computed between the ladder scores and the attitude scale measures. A system of dichotomous coding was used to recode the scores obtained from the group-perception ladder. Using the dichotomous ladder scores, the products for stability x legitimacy and status x legitimacy were computed. These products formed the variables to be correlated with the mean factor scores. Both correlations were statistically significant : stability with legitimacy  $r = .2773$  ( $p < .001$ ) and status with legitimacy  $r = .5444$  ( $p < .000$ ), thus providing a measure of validity for the ladder data. In all further analyses the ladder data was used as the primary measure of status, stability and legitimacy.

#### 5.2 Descriptive Statistics for Independent Variables

The raw data together with the accompanying computed scores obtained from the group-perception ladder are presented in Appendix G. The means and standard deviations for status, stability and legitimacy conditions are presented in Table 5-1.

Table 5-1: Means and Standard Deviations for Status, Stability and Legitimacy

Variable		Mean	Std Dev	N
Status of Ingroup	(A)			135
High Status	(A1)	3.04	2.51	69
Low Status	(A2)	- 6.04	2.59	66
Stability	(B)			134
Stable	(B1)	0.61	1.08	78
Unstable	(B2)	- 0.51	1.60	56
Legitimacy	(C)			134
Legitimate	(C1)	2.8	2.27	23
Illegitimate	(C2)	- 0.15	0.98	111

Overall, black subjects attributed a low status position to the ingroup (n = 66), while whites perceived their groups in a high status position relative to blacks (n = 69). Cases where no difference in the present position of blacks and whites was perceived were treated as anomalies (4 black subjects and 1 white subject), because the ratings given did not reflect the objective reality of the relative position of blacks and whites in South Africa. It is possible that these five subjects were using a different set of criteria such as religion. Therefore, the data obtained from these subjects were excluded from all further analyses. A total of 56 subjects perceived the status differential between the race groups as changeable within the next five years, while 78 subjects believed that the status differential is stable. The distribution of perceived legitimacy and illegitimacy was greatly unequal. A majority of 83 percent of the subjects believed that the status differences are unjust, compared with only 17 percent who believed that the status hierarchy is legitimate.

The computed scores for status, stability and legitimacy were subsequently recoded using the method of effect coding (Kerlinger and Pedhauzer, 1973). Each score was either assigned a value of 1 or -1 according to the following conditions: low status = -1, high status = 1; perceived instability = -1; perceived stability = 1; perceived legitimacy = 1 and perceived illegitimacy = -1. In all subsequent analyses the independent variables were treated as dichotomous categories.

### 5.3 The Effects of Status, Stability and Legitimacy on the Dependent Measures

The independent and interactive effects of status, stability and legitimacy on each of the dependent measures was investigated using multiple regression analyses. The large discrepancies in the number of subjects within each condition of the independent variable necessitated the use of multiple regression analyses. However, an analysis of variance interpretation of the regression was used. The stepwise programme for multiple regression as specified in the Statistical Package for the Social Sciences (1975) was followed. Status, stability and legitimacy variables were entered as dichotomous scores. The method of effect coding was used to enable the results to directly reflect an analysis of variance model.

To check for the absence of high multicollinearity that is, none of the independent variables were perfectly correlated with any other independent variable or linear combination of other independent variables, each independent variable was regressed on all the other independent variables (Lewis-Beck, 1980). This multicollinearity test produced the following  $R^2_x$ , in order of magnitude:  $R^2_{\text{Legit}} = .16$ ;  $R^2_{\text{Stabil}} = .50$ ;  $R^2_{\text{Status/Legit}} = .50$ ;  $R^2_{\text{Stabil/Legit}} = .50$ ;  $R^2_{\text{Status}} = .51$ ;

$R^2_{\text{Status/Stabil}} = .51; R^2_{\text{Status/Stabil/Legit}} = .51.$

Because none of these independent variables were highly intercorrelated, it was concluded that multicollinearity did not present a problem.

The results of the regression analysis are presented separately for each dependent measure. In each case the following statistics are included (1) intercept, entering as an A-constant into the equation, (2) semipartial regression coefficients (B-s) for those predictors which entered the equation, (3) the overall F-test and its significance, (4) the squared multiple correlation  $R^2$  indicating the percentage of explained variance and (5) standard error of prediction.

5.3.1 Voting Preferences

The raw scores together with the means for the ingroup and outgroup candidates are shown for each subject in Appendix H. In Table 5-2 the mean ingroup bias and standard deviation within each condition of the independent variables are presented.

Table 5-2: Ingroup Bias in Voting Preferences: Means and Standard Deviations

Perceptions of Status Relations	<u>High Status</u>		<u>Low Status</u>	
	Legit	Illegit	Legit	Illegit
<u>Stable</u>	- .667	.997	- .750	- .294
	(1.118)	(1.106)	(.957)	(1.031)
	9	31	4	34
<u>Unstable</u>	- .286	0.000	1.667	- .480
	(1.496)	(1.000)	(.577)	(1.159)
	7	21	3	25

The results of the regression analysis are presented in Table 5-3, with the variables entered in order of importance as established by the step-wise programme. The squared multiple correlation  $R^2$  are cumulative in the given order.

TABLE 5-3: Regression Analysis Results: The Effects of Status, Stability and Legitimacy on Ingroup Bias in Voting Preferences

Variable	R Square	B	Std Error	F
Status x Legit	.047	- .348	.134	6.760 p < .05
Stabil x legit	.063	- .381	.135	8.081 p < .01
Stabil	.083	- .311	.135	5.360 p < .05
Status x Stabil x Legit	.090	.265	.135	2.866
Status x Stabil	.110	.242	.135	3.244
Status	.115	- .132	.134	.972
Legit	.117	.729	.134	.292
(Constant)		- .111		
Mean Square = 1.147; df = 126				

$R^2$  = .117 indicating that 11.7% of the variation in ingroup bias in voting preferences is explained by the linear regression. The results indicate that stability alone, and the interactions between status and legitimacy, and stability and legitimacy explains a significant amount of the variation of ingroup bias in voting preferences. Each of the two-way interactions, status and legitimacy and stability and legitimacy, was investigated more closely using an analysis of simple main effects. This statistical technique pinpointed the specific combinations of each pair of independent variables responsible for the significant interactions.



a) Status x Legitimacy Interaction

Table 5-4: The Interaction Effects of Status x Legitimacy on Ingroup Bias in Voting Preferences: Analysis of Simple Main Effects

Source	SS	df	MS	F Ratio
Status at Legitimacy	12.177	1	12.177	10.373 p < .01
Status at Illegitimacy	1.517	1	1.517	1.292
Error	47.919	126	1.174	
Legitimacy at H.S.	4.695	1	4.696	3.4 p < .05
Legitimacy at L.S.	47.446	1	47.446	40.416 p < .01
Error	147.919	126	1.174	

The analysis of simple main effects indicated that when the status relations were perceived to be legitimate, the low status group displayed significantly more ingroup bias in voting preferences than the high status group. No similar trend was revealed when the status relations were seen as illegitimate. The relevant cell means are displayed in Table 5-5.

Table 5-5: Mean Ingroup Bias in Voting Preferences for Status x Legitimacy

Perceptions of Status Relations	Status	
	<u>H.S.</u>	<u>L.S.</u>
<u>Legitimate</u>	.137 (n = 17)	1.362 (n = 7)
<u>Illegitimate</u>	- .624 (n = 52)	-1.056 (n = 59)

In the high status group there was a significant difference in the direction of bias between the perception of the status differential as legitimate or illegitimate. Subjects who perceived the status differential as legitimate showed significant bias against the outgroup in their voting preferences, whereas the perception of illegitimacy resulted in a bias in favour of the outgroup (that is, a negative ingroup bias). A similar trend was found in the low status group where subjects who perceived the status relations as legitimate show significantly more ingroup bias in their voting choices than subjects who perceived the status relations as illegitimate. In a similar vein to the high status group, the perception of illegitimacy in the low status group produced a negative ingroup bias. The direction of the status x legitimacy interaction effect is illustrated graphically in figure 5-1.

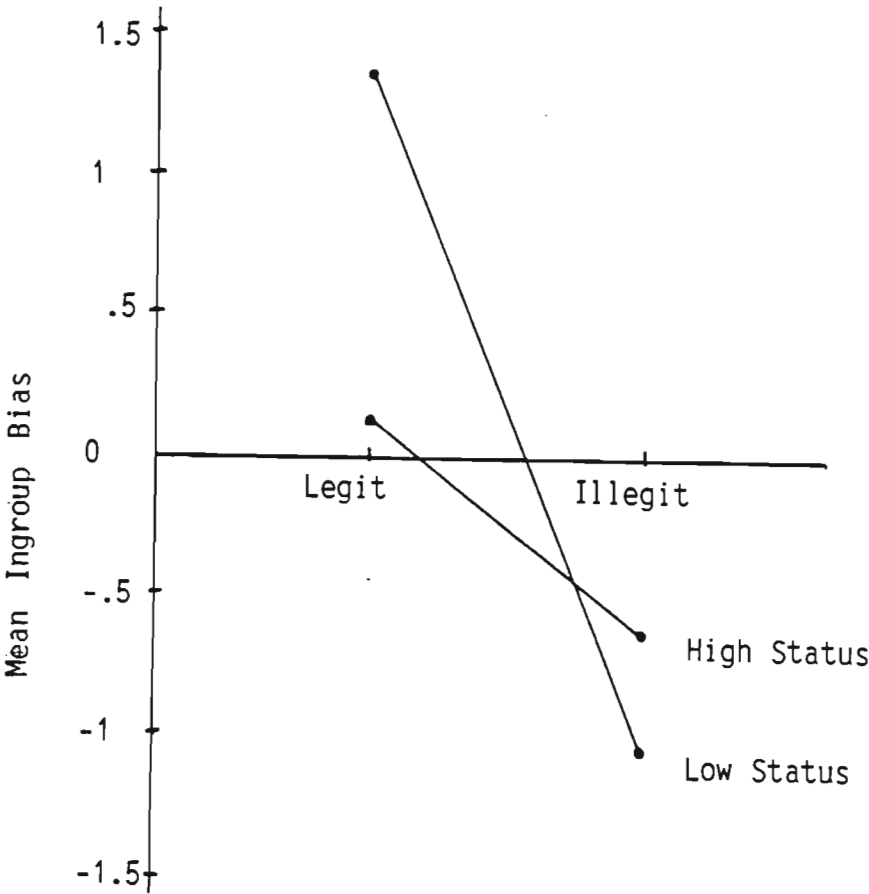


Figure 5-1: Status x Legitimacy Interaction Effects on Ingroup Bias in Voting Preferences

b) Stability x Legitimacy Interaction

Table 5-6: The Interaction Effects of Stability x Legitimacy on In-group Bias in Voting Preferences: Analysis of Simple Main Effects

Source	SS	DF	MS	F Ratio
Stability at Legitimacy	10.181	1	10.181	8.672 p < .01
Stability at Illegitimacy	.157	1	.157	.134
Error	147.919	126	1.174	
Legitimacy at Stability	7.476	1	7.476	6.368 p < .05
Legitimacy at Instability	39.953	1	39.953	34.033 p < .01
Error	147.919	126	1.174	

The analysis of simple main effects for the stability x legitimacy revealed several interesting trends. Firstly, subjects who perceived the status relations as legitimate and stable displayed significantly less ingroup bias in voting preferences than those who saw the status relations as legitimate but unstable. However, for those who believed that the status differential between blacks and whites is illegitimate, the perception of stability or instability did not have a statistically significant effect on bias in voting choices.

Of the subjects who perceived the status relations as stable, those who believed that the stratification is legitimate showed a significantly higher ingroup bias in their voting choices than subjects who believed that the system was illegitimate. In the latter group of subjects negative ingroup bias was displayed, thus favouring the outgroup. Similarly, the perception of legitimacy and instability produced significantly higher ingroup bias in voting choices than an

illegitimacy and instability system of beliefs. Again, the latter group displayed a strong negative ingroup bias. The relative means are presented in Table 5-7.

Table 5-7: Mean Ingroup Bias in Voting Preferences for Stability x Legitimacy Conditions

Perception of Status Relations	Stable	Unstable
<u>Legitimate</u>	.189 (n = 13)	- .771 (n = 10)
<u>Illegitimate</u>	1.310 (n = 65)	- .910 (n = 46)

In figure 5-2 the interaction effects of stability x legitimacy on ingroup bias in voting preferences are represented graphically.

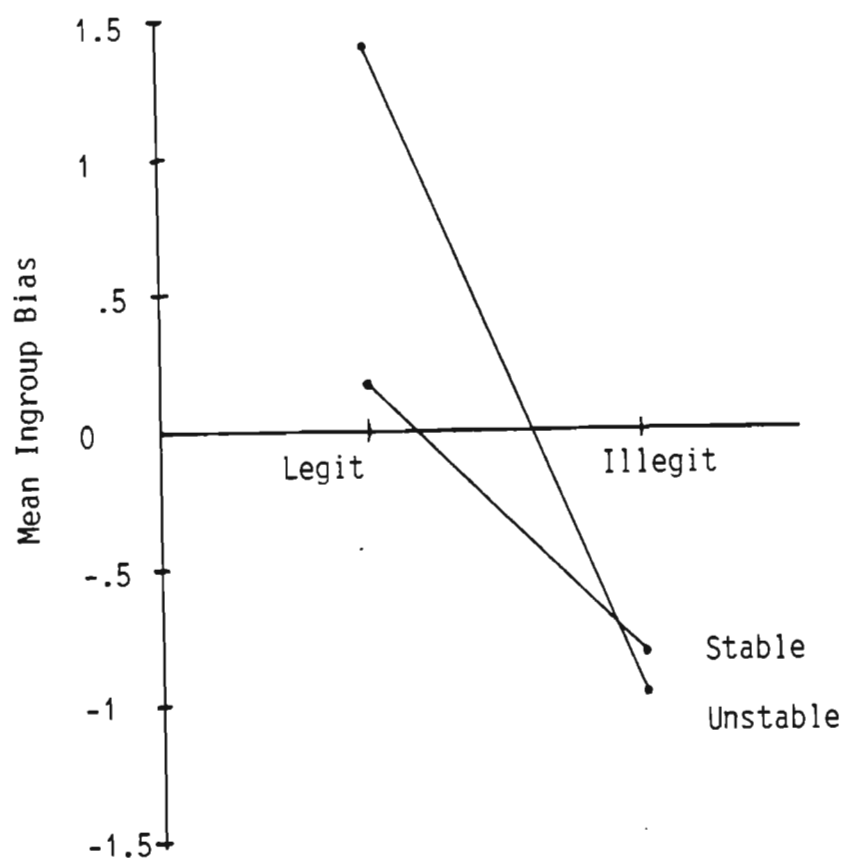


Figure 5-2: Stability x Legitimacy Interaction Effects on Ingroup Bias in Voting Preferences

5.3.2 Trait Evaluation

The raw data and the mean ratings for ingroup and outgroup candidates are included in Appendix I. The mean ingroup bias and standard deviations over the various conditions of the independent variables are displayed in Table 5-8.

Table 5-8: Ingroup Bias in Trait Evaluations: Means and Standard Deviations

Perception of Status Relations	<u>High Status</u>		<u>Low Status</u>	
	Legit	Illegit	Legit	Illegit
<u>Stable</u>	- .432 (.881) 9	- .409 (1.04) 31	.375 (.858) 4	.443 (1.125) 34
<u>Unstable</u>	- .341 (.802) 7	- .209 (.939) 21	- .778 (1.171) 3	.475 (.871) 25

The step-wise programme for multiple regression analysis produced the following results:

Table 5-9: Regression Analysis Results: The Effects of Status, Stability and Legitimacy on Ingroup Bias in Trait Evaluations

Variable	R Square	B	Std Error	F
Status	.115	-.2072	.1229	2.843
Status x Legit	.12	.1722	.1229	1.963
Legit	.128	-.1550	.1229	1.590
Status x Stabil	.132	-.1787	.1234	2.097
Stabil x Legit	.137	.1570	.1234	1.619
Status x Stabil x Legit	.147	.1017	.1234	.679
(Constant)		-.7097		
Mean Square = .987; df = 126				

The results of the regression analysis indicate that none of the independent variables either independently or interactively, contribute significantly to the variation of ingroup bias in trait evaluation.

5.3.3 Room Allocation

The raw scores are listed in Appendix J. The means and standard deviations for ingroup bias displayed in the allocation of rooms are shown in the table below.

Table 5-10: Ingroup Bias in Room Allocation: Means and Standard Deviations

Perception of Status Relations	<u>High Status</u>		<u>Low Status</u>	
	Legit	Illegit	Legit	Illegit
<u>Stable</u>	.222	.387	.500	.412
	(.667)	(2.092)	(1.000)	(1.689)
	9	31	4	34
<u>Unstable</u>	0.000	.095	-1.333	.480
	(0.000=	(1.480)	(1.155)	(1.327)
	7	21	3	25

Testing the effects of the independent variables was carried out by means of a step-wise regression analysis. No significant effects were revealed.

Table 5-11: Regression Analysis Results: The Effects of Status, Stability and Legitimacy on Ingroup Bias in Room Allocation

Variable	R Square	B	Std Error	F
Legit	.008	-.2483	.1948	1.524
Status x Legit	.012	.1798	.1948	.852
Status x Stabil x Legit	.016	-.2431	.1955	1.546
Stabil	.022	.2817	.1956	2.075
Stabil x Legit	.029	.2270	.1956	1.347
Status x Stabil	.033	-.1542	.1956	.622
Status	.034	.7822	.1948	.162
(Constant)		.1132		
Mean Square = 2.481; df = 126				

5.3.4 Relative Desirability of Rooms

A list of the weighted scores are contained in Appendix J. The descriptive statistics (means and standard deviations) for ingroup bias in the relative desirability of rooms allocated to the ingroup and outgroup are presented in Table 5-12.

Table 5-12: Ingroup Bias in the Relative Desirability of Rooms Allocated: Means and Standard Deviations

Perception of Status Relations	<u>High Status</u>		<u>Low Status</u>	
	Legit	Illegit	Legit	Illegit
<u>Stable</u>	2.556	.581	3.50	1.00
	(5.897)	(6.313)	(3.786)	(5.985)
	9	31	4	34
<u>Unstable</u>	.429	.095	-2.667	2.640
	(1.902)	(3.492)	(2.517)	(4.864)
	7	21	3	25



The results of the regression analysis are presented in Table 5-13, with the variables entered in order of importance in the step-wise programme.

**Table 5-13: Regression Analysis Results: The Effects of Status, Stability and Legitimacy on Ingroup Bias in Relative Desirability of Rooms Allocated**

Variable	R Square	B	Std Error	F
Status x Legit	.015	.7142	.4581	2.431
Stabil x Legit	0.26	1.1559	.6369	3.293
Stabil	0.34	.8768	.6408	1.872
Status x Stabil x Legit	.047	- .7702	.6408	1.444
Status x Stabil	.048	- .2488	.6369	.153
(Constant)		1.086		
Mean Square = 26.867; df = 128				

None of the F values reached the .05 level of significance, thus indicating that the independent variables do not contribute significantly to the variation in ingroup bias as measured by the relative desirability of rooms allocated to the ingroup and outgroup.

**5.3.5 Degree of Integration**

The computed integration scores for each subject are listed in Appendix J. The descriptive statistics over the different conditions of the independent variables are shown in the following table.

Table 5-14: Degree of Integration: Means and Standard Deviations

Perception of Status RElations	<u>High Status</u>		<u>Low Status</u>	
	Legit	Illegit	Legit	Illegit
<u>Stable</u>	6.222	8.677	8.750	8.515
	(4.207)	(2.926)	(2.217)	(1.805)
	9	31	4	33
<u>Unstable</u>	2.857	5.55	8.00	8.870
	(2.035)	(3.236)	(3.606)	(2.16)
	7	20	3	23

The integration scores were entered into a step-wise multiple regression analysis. The results with the variables in the given order of importance and the  $R^2$  being cumulative, are presented in Table 5-15.

Table 5-15: Regression Analysis Results: The Effects of Status, Stability and Legitimacy on Degree of Integration

Variable	R Square	B	Std Error	F	
Status	.094	-1.448	.3359	18.580	p < .01
Status x Stabil	.173	.7836	.3372	5.401	p < .05
Stabil	.234	.9070	.3372	7.235	p < .01
Legit	.292	-.7962	.3359	5.618	p < .05
Status x Legit	.318	-.6876	.3358	4.192	p < .05
Stabil X Legit	.319	.1893	.3372	.315	
Status x Stabil x Legit	.319	-.8369	.3371	.062	
(Constant)		7.1			
Mean Square = 7.153; df = 122					

The results show that status, stability and legitimacy main effects and the interaction between status and legitimacy and status and

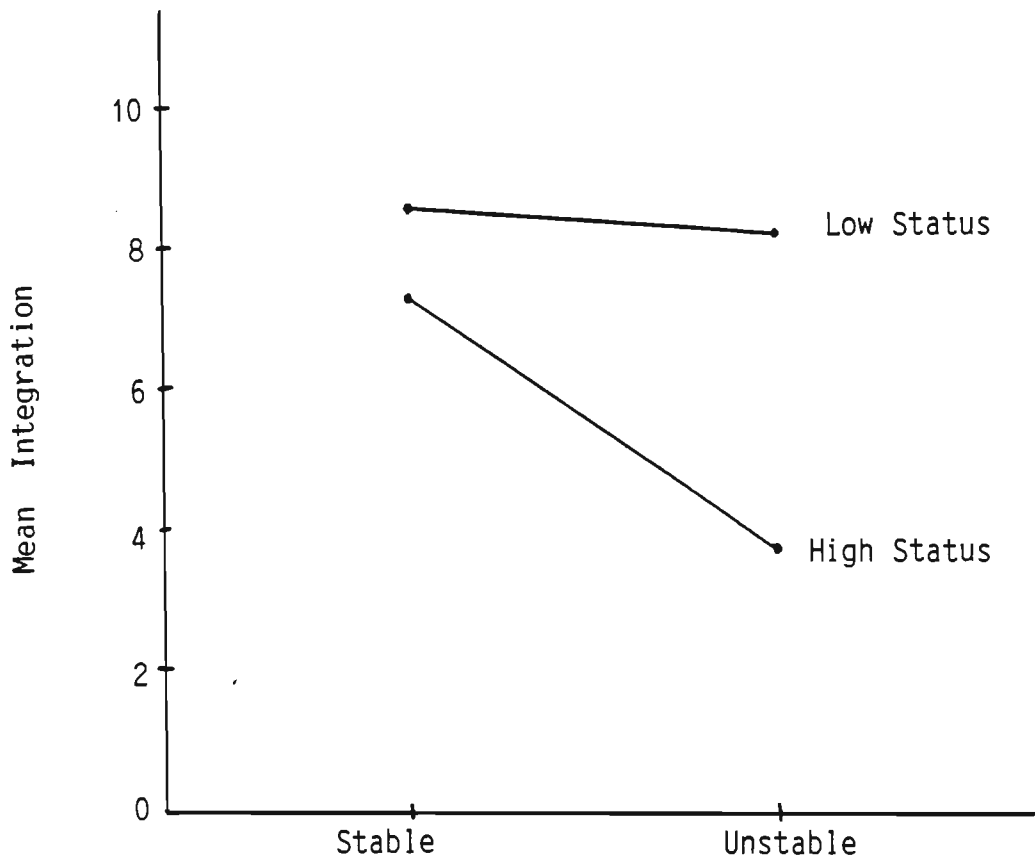
stability significantly explain 32 percent of the variation in the degree of integration. These effects were investigated further through the interactions of status and stability and status and legitimacy. This was carried out by means of simple main effects.

a) Status x Stability

The results of the analysis of simple main effects are shown in Table 5-16.

**Table 5-16: The Interaction Effects of Status x Stability on Degree of Integration: Analysis of Simple Main Effects**

Source	SS	DS	MS	F Ratio
Status at Stability	14.306	1	14.306	2.000
Status at Instability	161.496	1	161.496	22.579 p < .01
Error	872.609	122	7.153	
Stability at H.S.	92.713	1	92.713	12.962 p < .01
Stability at L.S.	.495	1	.495	.069
Error	872.609	122	7.153	



**Figure 5-3: Status x Stability Interaction Effects on Degree of Integration**

This trend of the results is clearly illustrated in Figure 5-3. The difference in degree of integration between high and low status groups who perceived the status relations as stable did not reach statistical significance ( $\bar{X}_{HS} = 7.343$  as compared with  $\bar{X}_{LS} = 8.671$ ). Where the status relations were perceived as unstable, status had a statistically significant effect. High status subjects displayed a significantly lower degree of integration ( $\bar{X} = 3.961$ ) than low status subjects ( $\bar{X} = 8.424$ ). Within the high status group those who perceived the status differential as stable ( $\bar{X} = 7.343$ ) displayed a degree of integration that was significantly greater than that of subjects who saw the differential as unstable ( $\bar{X} = 3.961$ ). The perception of stability or instability did not have any significant effect on degree of integration in the low status group.

b) Status x Legitimacy

An analysis of simple main effects produced the following statistics:

Table 5-17: The Interaction Effects Produced x Legitimacy Degree of Integration: Analysis of Simple Main Effects

Source	SS	df	MS	F Ratio
Status at Legitimacy	147.897	1	147.897	20.678 p < .01
Status at Illegitimacy	18.741	1	18.741	2.620
Error	872.609	122	7.153	
Legitimacy at H.S.	71.414	1	71.414	9.985 p < .01
Legitimacy at L.S.	.383	1	.383	.054
Error	872.609	122	7.153	

A graphical representation of the results of the analysis of simple main effects appears in Figure 5-4.

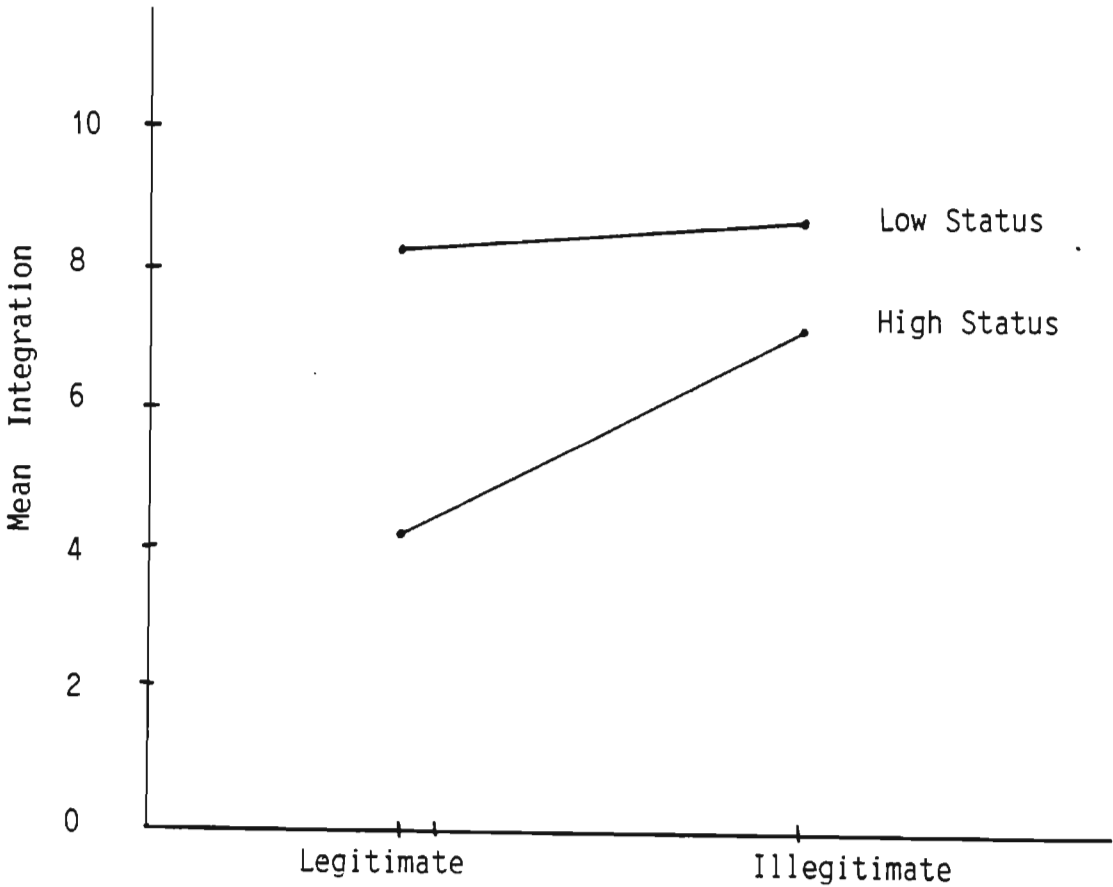


Figure 5-4: Status x Legitimacy Interaction Effects of Degree of Integration

Of the subjects who perceived the status relations as legitimate, low status group members displayed a significantly higher degree of integration ( $\bar{X} = 8.439$ ) than high status group members ( $\bar{X} = 4.168$ ). This trend was not replicated in the perceived illegitimacy condition. The difference in degree of integration between high status ( $\bar{X} = 7.136$ ) and low status ( $\bar{X} = 8.656$ ) group members who perceived the status hierarchy as illegitimate did not reach statistical significance.

Looking at perceived legitimacy/illegitimacy effects within each status condition, it can be seen that high status subjects who perceived the status relations as legitimate ( $\bar{X} = 4.168$ ) showed a significantly lower degree of integration than those subscribing to a perceived illegitimacy system of beliefs ( $\bar{X} = 7.136$ ). However, within the low status group the perceived legitimacy/illegitimacy of the status relations did not have a significant effect on the degree of integration. Both legitimate and illegitimate belief systems produced a similar degree of integration in the low status group. The respective means are 8.439 and 8.656, almost identical.

## CHAPTER 6

### DISCUSSION

#### 6.1 Interpretation of the Findings

A statistically significant pattern of results was found on two of the five dependent measures; namely, ingroup bias in voting preferences and degree of integration displayed in the allocation of rooms to the ingroup and outgroup. The predicted three-way interaction between status, stability and legitimacy was not verified. Instead, it was found that the variation in intergroup bias on the two measures could be significantly explained by several two-way interactions between the independent variables.

The hypothesized interactive effect between status and legitimacy on intergroup bias received only partial support. Although the status and legitimacy interaction was found to be statistically significant on both the dependent measures, the direction of bias did not completely reflect the predicted pattern. In the high status group the perception of illegitimacy produced a significant decrease in ingroup bias relative to the perception of legitimacy, to the extent that a negative ingroup bias (or outgroup favouritism) was displayed. Similarly, on the measure of integration, members of the high status group who perceived the status stratification as illegitimate showed a higher degree of integration than those who adhered to the present status differentiation. These results support the prediction derived from Social Identity theory that in situations where the status hierarchy is believed to be unjust, membership in a high status group may no longer contribute positively to the social identity, resulting in a reduction in ingroup bias in favour of the outgroup. In the experiment by Turner and Brown (1978) the illegitimate high status

subjects showed a similar trend by suggesting numerous alternative comparison dimensions which favoured the outgroup, rather than strengthening their own superior position. Commins and Lockwood (1979) also observed a reduction in ingroup bias in groups having an illegitimately advantaged position.

The unexpected finding emerged in the pattern of bias displayed by members of the low status group who perceived the status differential as illegitimate. In comparison with low status subjects in the legitimacy condition, these subjects showed a significantly lower degree of ingroup bias. In fact, the direction of bias in the low status illegitimacy condition replicated that displayed by the comparable high status group, that is, a negative ingroup bias. This finding contradicts the prediction derived from Social Identity theory that perceived illegitimacy in low status groups will be associated with strong ingroup bias, emerging from an assertive distinctiveness.

Before indulging in any speculations concerning the reasons for this unexpected finding, it is important to restate that the variables status, legitimacy and stability and their interactions were found to explain only 11.7 percent of the variation in ingroup bias in voting choices. This implies that a greater proportion of the variation is explainable in terms of factors other than those under investigation. The validity of the results is also impaired by several methodological problems and limitations. One of the most pertinent among these concerns the large inequality in the number of subjects within each condition of the independent variables. For example, the comparison between the legitimate and illegitimate low status conditions is based on the responses of seven subjects in the former condition, while a total of fifty-nine subjects constituted the illegitimacy condition. Furthermore, on the measure of integration no similar difference was



found between the perceived legitimacy and illegitimacy low status conditions. These factors suggest that it is possible that the finding concerning the low status illegitimacy condition is artifactual.

The results for the effects of stability/instability show greater agreement with the predicted trends. High status group members who believed that the status relations are unstable displayed a lower degree of integration in allocating rooms to those who believed the situation to be stable. In the low status group there was no significant difference between the perceived stability and instability conditions. The relevant findings for ingroup bias in voting preferences reveal that the variable stability, only had a significant effect in groups who perceived the status relations as legitimate, in which case the perception of instability produced greater ingroup bias than perceived stability. On the whole, under conditions where stability/instability did have a significant effect, the perception of instability of the status relations resulted in an enhancement of the direction of intergroup bias, confirming the hypothesized trend for stability and status and stability and legitimacy interactive effects. In terms of Social Identity theory, in situations where the status relations are seen as unstable, there is an attempt to increase psychological distinctiveness manifested in greater ingroup bias. The reported results provide some evidence for this proposition.

A statistically significant difference between the intergroup behaviour of high and low status groups was found only in groups who believed that the present status differential is legitimate. In their decisions concerning voting choices, subjects in the low status group showed greater ingroup bias than the comparable high status group. On the other hand, where the status differences were seen as legitimate, low

status group members displayed a higher degree of integration than high status group members. Hence, it appears that the perception of legitimacy is more salient in the low status group, eliciting a stronger reaction from its members.

The results for status and stability revealed that where the status relations were seen as unstable, high status group members displayed a lesser degree of integration than low status group members. This effect was not replicated under conditions of perceived stability. This finding is in accord with the assertion by Turner and Brown (1978) that the influence of perceived instability is more pronounced in high than low status groups.

To sum up it can be said that the findings of the present study provide partial support for the predictions of Social Identity theory. The few findings that are not in accord with the theory need to be seen in the context of the methodological inadequacies and limitations of the design.

## 6.2 Evaluation of the Results

An issue begging discussion concerns the failure of three of the dependent measures to show any significant pattern of results; whereas the two other measures showed significant differences in patterns of intergroup bias across the various conditions of status, stability and legitimacy.

Brewer (1979) noted that the bias associated with any particular social categorization may not be constant across all response dimensions. In an extensive review on patterns of ingroup bias, this author drew attention to the phenomenon of 'selective bias' or specificity of effects. The results of several studies have confirmed

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that bias is not consistent along all types of measures. Studies by Wilson et al (1965, 1968) indicated that following intergroup competition evaluative bias is most pronounced on task-relevant motive traits, less pronounced on ability traits and least evident on personality dimensions. Gerard and Hoyt (1974) found that small groups in a non-competitive setting, evaluated ingroup members more positively, but not ingroup products. More, recently, in the study of Bourhis and Hill (1982), no significant pattern of ingroup bias was found when university and polytechnic lecturers used salary matrices to distribute pay awards to each group. However, when using a different measure, namely, distribution of educational cuts, a significant bias in favour of the ingroup was found.

Thus, the occurrence of 'selective bias' has been frequently observed in social psychological research. The inclusion of several response dimensions is a means by which the specificity of effect may be counteracted.

Milner (1981) has emphasized the importance of the need for more covert measures of prejudice, if researchers are to successfully tap real responses in societies like South Africa, where interracial conflict is a sensitive issue. Certainly, in a situation like that of an English-speaking university campus, namely, the University of Natal, Durban, the expression of overt racial prejudice is disdained. Milner (1981) pointed out that in a social context where there are pressures towards antidiscriminatory attitudes, the content and expression of racism may become more implicit. Bearing this in mind, it may be argued that statistically significant results were obtained on the measures of integration and voting preferences because these dimensions were more subtle and less accessible in terms of their intention. Contrastingly, in the allocation task subjects were openly

asked to distribute rooms of relative desirability between black and white students. Measuring the degree of integration is far greater in its subtlety than scoring the relative number and desirability of rooms. Therefore, greater care needs to be taken in the choice of psychological measures when conducting research of this nature (Hewstone and Giles, 1984).

The need for measures of intergroup discrimination which are more implicit and less accessible to scrutiny, assumes even greater importance when the role of social desirability bias is considered as an additional confounding factor.

In a review on the topic, Nederhof (1985) stressed that social desirability is one of the most common sources of extraneous factors affecting the validity of social science research data. An instrument such as a questionnaire used for data collection on interracial attitudes is particularly susceptible to the operation of social desirability. This type of bias refers to the tendency on behalf of subjects to present socially desirable traits, while at the same time denying any socially undesirable ones. Against the backdrop of several attempts to improve intergroup relations between blacks and whites, subjects participating in this study may have reckoned that any expressions of discriminatory behaviour would not place them in a favourable light. The use of the anonymous self-administered questionnaires was an attempt to reduce social desirability bias. There are empirical indications that this method of administration does give rise to less distortion than other methods (cf. Baumeister, 1982; Paulhus, 1984). Since there is no single method to completely counteract social desirability bias, it is suggested that future research takes note of Nederhof's (1985) recommendation that supplementary measures to assess its impact are included.

A limitation of the measures used in this study is that they focus largely on ratings and judgements which tend to reveal very little about the behaviour between groups. Hewstone and Giles (1984) commented that tasks such as reward allocation and the evaluation of persons on trait scales are very unusual in terms of everyday life events. Therefore, responses on these tasks may not be related to behavioural patterns in realistic situations. Similarly, new forms of racism may be more racist in their behavioural manifestations rather than in verbalized attitudes (Milner, 1981). Consequently, the need to explore the impact of intergroup perceptions on behaviour by means of new techniques is reiterated. As noted by Hewstone and Giles (1984) such behavioural measures are often time consuming and fraught with practical problems. Nevertheless, these measures are of crucial importance in social research and they may be used as an adjunct to questionnaires.

At this point it is worth noting that the informative value of the data of this study may have been enhanced if the ratings for the ingroup and outgroup had been reported separately. In most of the studies reviewed, the results for patterns of ingroup bias are similarly reported in the form of net ratings or differences scores (e.g. Doise and Sinclair, 1973; Gerard and Hoyt, 1974; Turner and Brown, 1978). Although this method of analysis does treat bias as the ingroup score relative to the outgroup score, information is lost as to whether variations in bias were due to increases in ingroup ratings or decreases in outgroup ratings. As a result, the location of bias, ingroup or outgroup, is not made clear (Brewer, 1979).

The treatment of the variables status, stability and legitimacy in this study differed somewhat from earlier experiments in which these

variables were typically imposed on groups of subjects. Rather, an attempt was made to assess perceptions of the status relations as they exist in the relevant populations. Although the numerous objective differences between blacks and whites indicated the relative status position of these groups, this was confirmed by investigating the individual's perception of these differences. The use of the group perception ladder was, however, not without problems. The emergence of a small number of anomalies indicated that the subjective nature of this type of scales permits the use of various comparison dimensions, which may not concur with the dimensions the researcher believes is being used. Further testing of the ladder rating scale is required before its effectiveness in assessing intergroup perceptions may be fully evaluated.

### 6.3 Limitations of this Study

The extent to which the findings of this research can be generalized is limited by the specificity of the sample to a small area within the larger South African context. The subjects were all students registered at the University of Natal, Durban. Historically, this is an area of South Africa which is known for its more tolerant racial attitudes relative to the rest of the country. Consequently, a different pattern of results may be expected in other national regions.

A further limitation of this study is that it is stranded in time. Sherif and Sherif (1965) argued for the usefulness of longitudinal research within the domain of intergroup processes. Similarly, Brown and Ross (1982) exhorted the need for empirical accounts which take into account the changing nature of social identity elements. To the extent that this study was conducted within a dynamic real-life intergroup setting, some of the problems associated with a static perspec-

tive of intergroup phenomena were avoided. However, follow-up research is necessary if the nature of the changes that occur are to be empirically documented. Such a task would not be easy, since the measurement of change is always complex, particularly when major economic and social upheavals occur alongside the research (Hewstone and Giles, 1984).

The methodological problems associated with the measures used also detract from the generalizability of the findings. The extent of the problems that emerged during the course of the study, made it clear that detailed pre-testing is essential when realistic groups are used. Attempts should also be made to elucidate any variables other than those under investigation, which may affect the results.

#### 6.4 Conclusion

This research endeavoured to test the applicability of certain theoretical constructs, derived from Tajfel's (1978b) Social Identity theory, to the complex intergroup situation between blacks and whites in South Africa. The findings provide some support for the importance of perceived status, stability and legitimacy in mediating the attitudes and perceptions of real-life groups. However, the numerous methodological and practical problems which emerged during the course of the research render any extrapolations from the data to other intergroup situations purely speculative until further research is completed. Similarly, the limited nature of this study does not permit any profound theoretical implications of the results. Perhaps, at this point it is apt to refer to the observation by Hewstone and Giles (1984) that "theoretically relevant variables are rarely found in any pure form in realistic settings and there may be unavoidable confounds or impractical controls" (p288). The present study has illuminated

several of these confounding variables that are encountered when conducting research of this nature.



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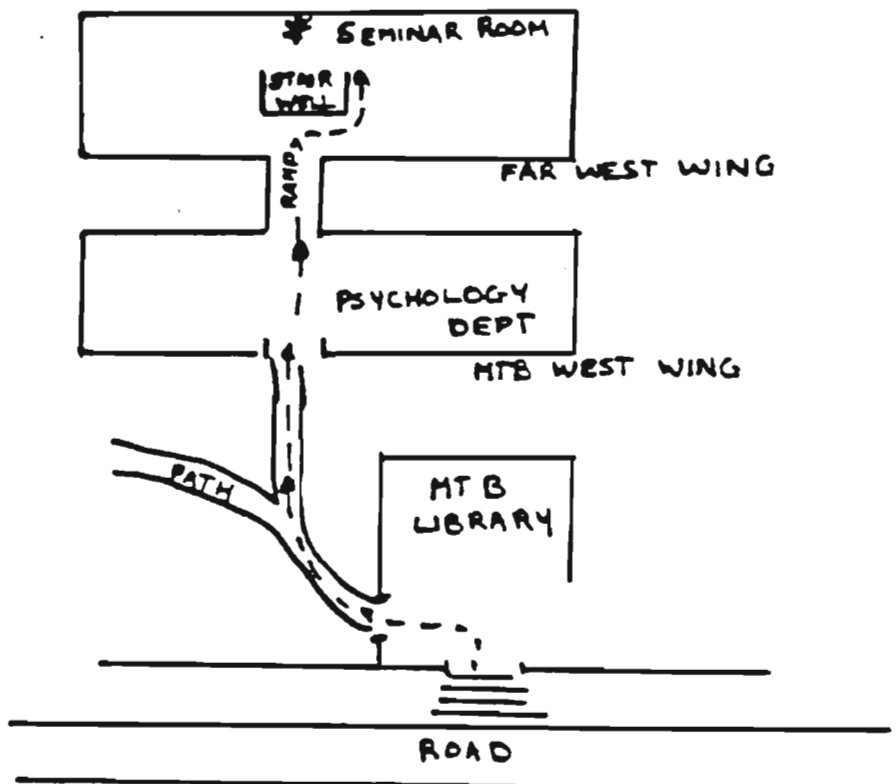
A: BULLETIN BOARD ADVERTISEMENT FOR SUBJECTS

Department of Psychology  
University of Natal, Durban

---

STUDENT PARTICIPANTS REQUIRED FOR ATTITUDE RESEARCH

We need students of all types to participate in a study investigating the use of various techniques in the measurement of attitudes toward social issues and practices. All you have to do is answer a questionnaire and you will be paid R2.00. Your participation will be invaluable. If you are interested please report to the Psychology Seminar Room at 1.10 pm from Monday 23 September to Friday 4 October 1985.





B: PRELIMINARY ATTITUDE SCALE

Here are some statements on social issues about which we all have beliefs, opinions and attitudes. We all think differently about such matters, and this scale is an attempt to let you express your beliefs and opinions. There are no right or wrong answers. The best answer to each statement below is your personal opinion. Do not spend much time on any statement; let your personal experience determine your answer. Please respond to each of the items as follows:

- 1 - completely disagree
- 2 - mostly disagree
- 3 - slightly disagree
- 4 - undecided or no definite feelings one way or another
- 5 - slightly agree
- 6 - mostly agree
- 7 - completely agree

Answer by placing a cross (X) in the space which best shows your feelings.

\*\*\*\*\*

In their efforts to help blacks, people should not blind themselves to the definite differences which actually exist between the races.

completely disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely agree

The different social backgrounds of blacks and whites makes it difficult for them to mix socially.

completely disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely agree

Because all races are equal, blacks are entitled to the same privileges as whites.

completely disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely agree

In/...

In South Africa whites have clearly shown their superiority over other race groups, therefore power should remain in the hands of whites.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

It will be many years before blacks reach the same level of civilisation as that of whites.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Blacks should be considered as equal to whites and be given the same advantages as whites.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

A large part of the problems facing blacks today are caused by blacks themselves.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Everybody would be happier, more secure and more prosperous if blacks were given more power and influence in the government.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

It would be a mistake ever to have blacks for managers and leaders over whites.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

South/...

South Africa is a land of opportunity and people get pretty much what is coming to them here.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Most blacks would become overbearing and disagreeable if given the opportunity to hold positions of power.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

The people who raise all the talk about putting blacks on the same level as whites are mostly radical agitators trying to stir up conflicts.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Because of great cultural differences, it would be unwise for blacks and whites to live in the same neighborhood.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Change and reform in South Africa has gone far enough, things should now be left as they are.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

There is no reason to believe that blacks are less honest than anyone else.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Even/...

Even if blacks should reach the same level of development as whites, the races should still be separated socially.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

If other African states are examples of how a black government operates, we do not need one.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

People of different races can get along very easily if given the chance.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Inherited racial characteristics play more of a part in the achievement of individuals and groups than is generally accepted.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

The end of white rule in South Africa would bring a continuing increase in social conflict and violence.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Blacks should make sincere efforts to rid themselves of their conspicuous and irritating faults, if they want to achieve equality with whites.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

We/...

We should all work towards the unity of blacks and whites in South Africa.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Blacks should have the advantage of all the social benefits of the white person, but be limited to their own race in the practice thereof.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

The dislike of many people for blacks is based on prejudice, but is nevertheless, not without a certain justification.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Since integration will require some painful adjustments to be made in changing from segregated schools, neighbourhoods etc., the best solution is to leave the races segregated.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

The best way to solve the problems between the races is to encourage intermarriage so that there will eventually be only one race.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

The time has come to solve the racial problems of South Africa by giving equal opportunities for all in every sphere of life.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Because/...

Because of their physical strength, blacks are inherently suited to do manual labour.

completely  
disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely  
agree

The policy of separate but equal is not as bad as some people think, since it permits each race to maintain and preserve their own cultural values.

completely  
disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely  
agree

What we need is firmer action against people who publicly criticize the racial policies of the present system of government.

completely  
disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely  
agree

C: TRAIT FAVOURABILITY SCALE



Look at the adjectives. Decide for each one whether it is favourable, unfavourable or neutral, as usually used to describe people. Indicate the degree of favourableness of each adjective as follows:

- 1 - very unfavourable
- 2 - unfavourable
- 3 - neutral
- 4 - favourable
- 5 - very favourable

Although there may be several usages to consider in determining the degree of favourableness implied by a given adjective, we only want a global or general rating, so give your immediate first impressions, and do not spend too much time on any single one. Answer by placing a cross (X) in the space which best indicates your feelings.

responsible

very unfavourable	1	2	3	4	5	very favourable
----------------------	---	---	---	---	---	--------------------

unemotional

very unfavourable	1	2	3	4	5	very favourable
----------------------	---	---	---	---	---	--------------------

intolerant

very unfavourable	1	2	3	4	5	very favourable
----------------------	---	---	---	---	---	--------------------

open-minded

very unfavourable	1	2	3	4	5	very favourable
----------------------	---	---	---	---	---	--------------------

emotional

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

closed-minded

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

warm

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

cooperative

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

immature

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

flexible

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

unassuming

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

uncooperative

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

cold

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

inflexible

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

mature

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

irresponsible

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

arrogant

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

tolerant

very  
unfavourable

1	2	3	4	5
---	---	---	---	---

very  
favourable

D: THE QUESTIONNAIRE

## General Attitude Survey

This questionnaire investigates perceptions and attitudes regarding a number of social matters. Please answer all questions as truthfully as possible. There are no right or wrong answers. Your opinion will make a valuable contribution towards this study, so let your personal views and experience determine your response. Your name will not appear anywhere on this questionnaire, therefore you will remain anonymous. All answers are treated as confidential; the information will be processed by a computer and will come out as general statistics. If you require further information about any of the questions, please ask.

Thank you for your participation in this study.

Department of Psychology

University of Natal

Durban

1985.

Recently there has been much talk about the integration of student residences on some university campuses. The following page consists of sketch plans of the room layout on two floors of a residence block. It is known that certain rooms are more desirable than others in terms of their access to facilities, noise level, lighting etc. Hence, they have been graded as follows:

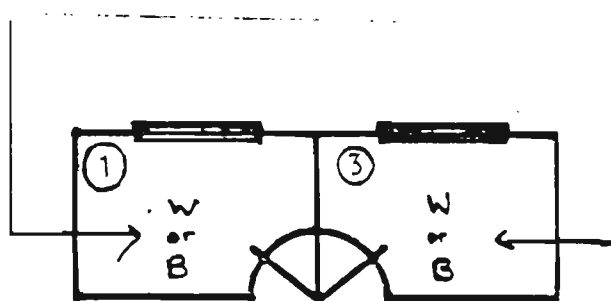
least desirable : ①

more desirable : ②

most desirable : ③

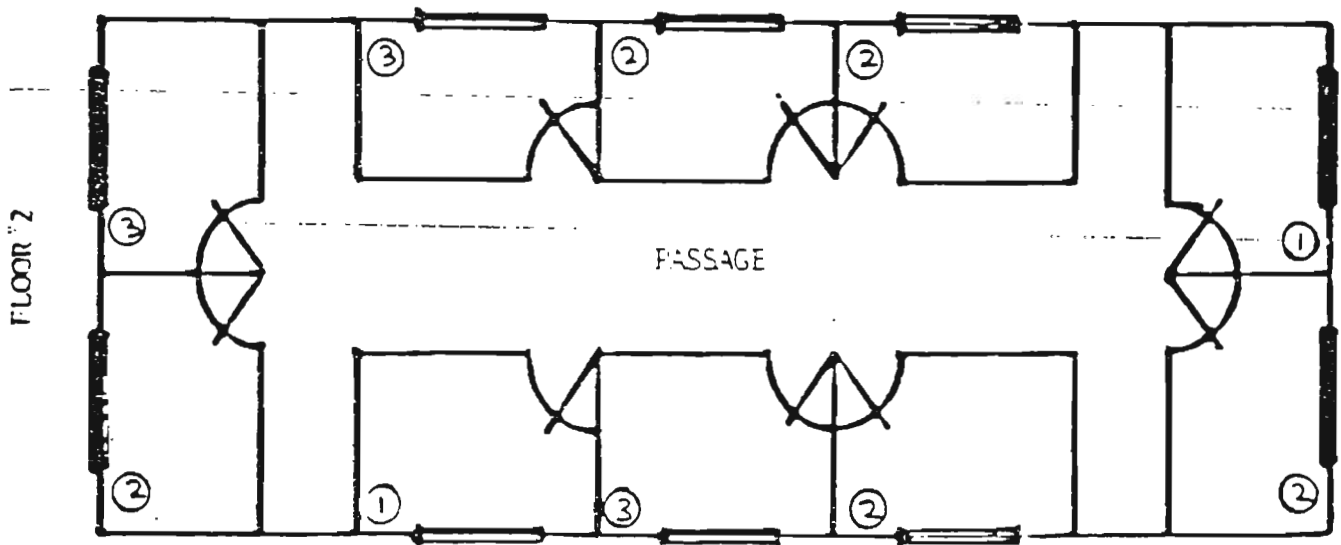
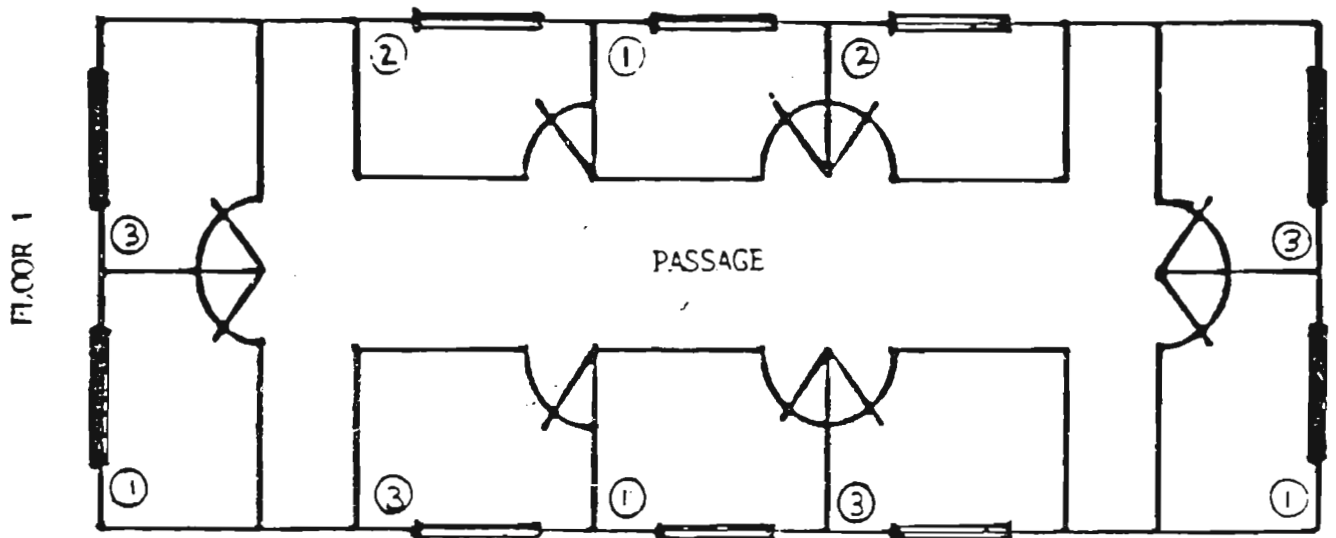
Suppose that this residence is made available to students of all race groups. At the beginning of the academic year, an equal number of white and black students apply for residence. Imagine that you are given the task of assigning students to rooms. In the case of each room please mark off either W (white) or B (black) on the diagram according to the race of the student to whom you would allocate the room.

Example : Indicate your decision (W or B) in this space.





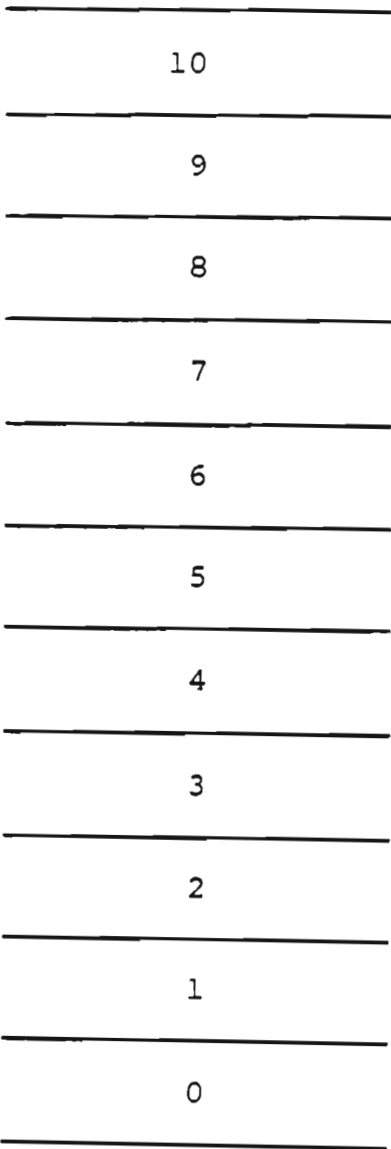
FACADE OF STUDENT RESIDENCE



① -LEAST DESIRABLE

② -MORE DESIRABLE

Here is a picture of a ladder. Let the ladder represent life circumstances in South Africa. Imagine that the top represents the best possible life that you could hope for in this country, while the bottom represents your idea of the worst possible life in this country.



If you consider the position of blacks as a whole, where would you say blacks stood on the ladder at the present time?

Step number \_\_\_\_\_



Where do you think blacks stood five years ago?

Step number \_\_\_\_\_

Just as your best guess, where do you think blacks will be five years from now?

Step number \_\_\_\_\_

Now, looking at the ladder again, we would like you to think of whites in South Africa. Where do you think they stand at the present time?

Step number \_\_\_\_\_

Where do you think whites stood five years ago?

Step number \_\_\_\_\_

As your best guess, where do you think whites will be on the ladder five years from now?

Step number \_\_\_\_\_

Imagine an ideal situation in this country where everything is "as it should be".

Where would blacks be on the ladder?

Step number \_\_\_\_\_

Where would whites be on the ladder?

Step number \_\_\_\_\_

Here are some statements on social issues about which we all have beliefs, opinions and attitudes. We all think differently about such matters, and this scale is an attempt to let you express your beliefs and opinions. There are no right or wrong answers. The best answer to each statement below is your personal opinion. Do not spend much time on any statement; let your personal experience determine your answer. Please respond to each of the items as follows:

- 1 - completely disagree
- 2 - mostly disagree
- 3 - slightly disagree
- 4 - undecided or no definite feelings one way or another
- 5 - slightly agree
- 6 - mostly agree
- 7 - completely agree

Answer by placing a cross (X) in the space which best shows your feelings.

\*\*\*\*\*

It will be many years before blacks reach the same level of civilisation as that of whites.

completely  
disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely  
agree

Blacks should be considered as equal to whites and be given the same advantages as whites.

completely disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely agree

A large part of the problems facing blacks today are caused by blacks themselves.

completely disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely agree

Everybody would be happier, more secure and more prosperous if blacks were given more power and influence in the government.

completely disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely agree

It would be a mistake ever to have blacks for managers and leaders over whites.

completely disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely agree

Most blacks would become overbearing and disagreeable if given the opportunity to hold positions of power.

completely disagree	1	2	3	4	5	6	7	completely agree
------------------------	---	---	---	---	---	---	---	---------------------

Change and reform in South Africa has gone far enough, things should now be left as they are.

completely disagree	1	2	3	4	5	6	7	completely agree
------------------------	---	---	---	---	---	---	---	---------------------

There is no reason to believe that blacks are less honest than anyone else.

completely disagree	1	2	3	4	5	6	7	completely agree
------------------------	---	---	---	---	---	---	---	---------------------

Even if blacks should reach the same level of development as whites, the races should still be separated socially.

completely disagree	1	2	3	4	5	6	7	completely agree
------------------------	---	---	---	---	---	---	---	---------------------

The end of white rule in South Africa would bring a continuing increase in social conflict and violence.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Blacks should have the advantage of all the social benefits of the white person, but be limited to their own race in the practice thereof.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Since integration will require some painful adjustments to be made in changing from segregated schools, neighbourhoods etc., the best solution is to leave the races segregated.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

The best way to solve the problems between the races is to encourage intermarriage so that there will eventually be only one race.

completely disagree	1	2	3	4	5	6	7	completely agree
---------------------	---	---	---	---	---	---	---	------------------

Because of their physical strength, blacks are inherently suited to do manual labour.

completely  
disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely  
agree

What we need is firmer action against people who publicly criticize the racial policies of the present system of government.

completely  
disagree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

completely  
agree

Let us assume that student faculty council elections are about to take place. Four candidates are standing for election to your faculty council. Below are their names, together with their election manifestos:

Candidate: ROGER DORKIN

Year: Third

Manifesto

A vote for ROGER DORKIN means

- \* Efficient and accurate representation for all students
- \* Enthusiasm, hard work and responsibility
- \* More student benefits
- \* A step towards direct and sincere communication between staff and students
- \* Increased spirit and involvement among students

\*\*\*\*\*

Candidate: PETER NGCOBO

Year: Third

Manifesto

If you believe in:

- \* meaningful representation
- \* hard work as a means to an end
- \* sharing ideas, plans and skills
- \* the priority of student interests
- \* the smooth organisation of the faculty

Vote PETER NGCOBO

Candidate: CHARLES LABUSCHAGNE

Year: Third

Manifesto

I promise to

- \* Represent students in all spheres from academic to social
- \* Help students whenever they have problems with lecturers, courses etc.
- \* Promote participation and involvement among students
- \* Communicate effectively at all levels

Remember CHARLES LABUSCHAGNE will work hard for you!

\*\*\*\*\*

Candidate: BONGANI NTULI

Year: Third

Manifesto

Vote BONGANI NTULI

- \* Communication, participation and organisation
- \* Positive representation of student interests
- \* Course reform
- \* Better administration of student activities
- \* Efficiency and Enthusiasm

Remember to Vote

It's your Faculty Council

\*\*\*\*\*



Which of these candidates would you vote for?

Please indicate your voting preference by filling in either :

- 1 - first choice,      2 - second choice, 3 - third choice    or  
4 - fourth choice in the space next to the candidate's name.

ROGER DORKIN	
PETER NCGOBO	
CHARLES LABUSCHAGNE	
BONGANI NTULI	

We would also like to find out what you think of the different candidates.    On the following pages you will find the name of a candidate at the top of the page followed by a list of adjectives. The candidate is to be described using the pairs of adjectives that are printed below.    Place a cross (X) in the space which best expresses your impression of the person.

For example, if you feel that the candidate appears extremely arrogant, you would mark this as follows:

arrogant                        X                                                            unassuming  
                                         1       2       3       4       5       6       7

If on the other hand you think that the person is moderately arrogant you would mark as follows:

arrogant                                    X

ROGER DORKIN

mature	— — — — —	immature
unemotional	— — — — —	emotional
intolerant	— — — — —	tolerant
unassuming	— — — — —	arrogant
open-minded	— — — — —	closed-minded
uncooperative	— — — — —	cooperative
responsible	— — — — —	irresponsible
cold	— — — — —	warm
flexible	— — — — —	inflexible

PETER NCGOBO

flexible

\_\_\_\_\_

inflexible

arrogant

\_\_\_\_\_

unassuming

unemotional

\_\_\_\_\_

emotional

responsible

\_\_\_\_\_

irresponsable

warm

\_\_\_\_\_

cold

uncooperative

\_\_\_\_\_

cooperative

mature

\_\_\_\_\_

immature

closed-minded

\_\_\_\_\_

open-minded

tolerant

\_\_\_\_\_

intolerant

CHARLES LABUSCHAGNE

immature	— — — — —	mature
emotional	— — — — —	unemotional
intolerant	— — — — —	tolerant
arrogant	— — — — —	unassuming
open-minded	— — — — —	closed-minded
cooperative	— — — — —	uncooperative
responsible	— — — — —	irresponsible
cold	— — — — —	warm
inflexible	— — — — —	flexible

BONGANI NTULI

inflexible	_____	flexible
unassuming	_____	arrogant
unemotional	_____	emotional
irresponsible	_____	responsible
warm	_____	cold
cooperative	_____	uncooperative
mature	_____	immature
closed-minded	_____	open-minded
intolerant	_____	tolerant

E: LATIN-SQUARE ARRANGEMENT FOR THE COMPILATION OF THE QUESTIONNAIRE

A	B <sup>1</sup>	C	D <sup>1</sup>
D <sup>1</sup>	C	B <sup>1</sup>	A
C	D <sup>1</sup>	A	B <sup>1</sup>
B <sup>1</sup>	A	D <sup>1</sup>	C

A	D <sup>2</sup>	B <sup>2</sup>	C
B <sup>2</sup>	A	C	D <sup>2</sup>
C	B <sup>2</sup>	D <sup>2</sup>	A
D <sup>2</sup>	C	A	B <sup>2</sup>

A	C	D <sup>3</sup>	B <sup>1</sup>
D <sup>3</sup>	B <sup>1</sup>	A	C
B <sup>2</sup>	A	C	D <sup>3</sup>
C	D <sup>3</sup>	B <sup>1</sup>	A

A	B <sup>2</sup>	D <sup>4</sup>	C
C	D <sup>4</sup>	B <sup>2</sup>	A
B <sup>2</sup>	C	A	D <sup>4</sup>
D <sup>4</sup>	A	C	B <sup>2</sup>

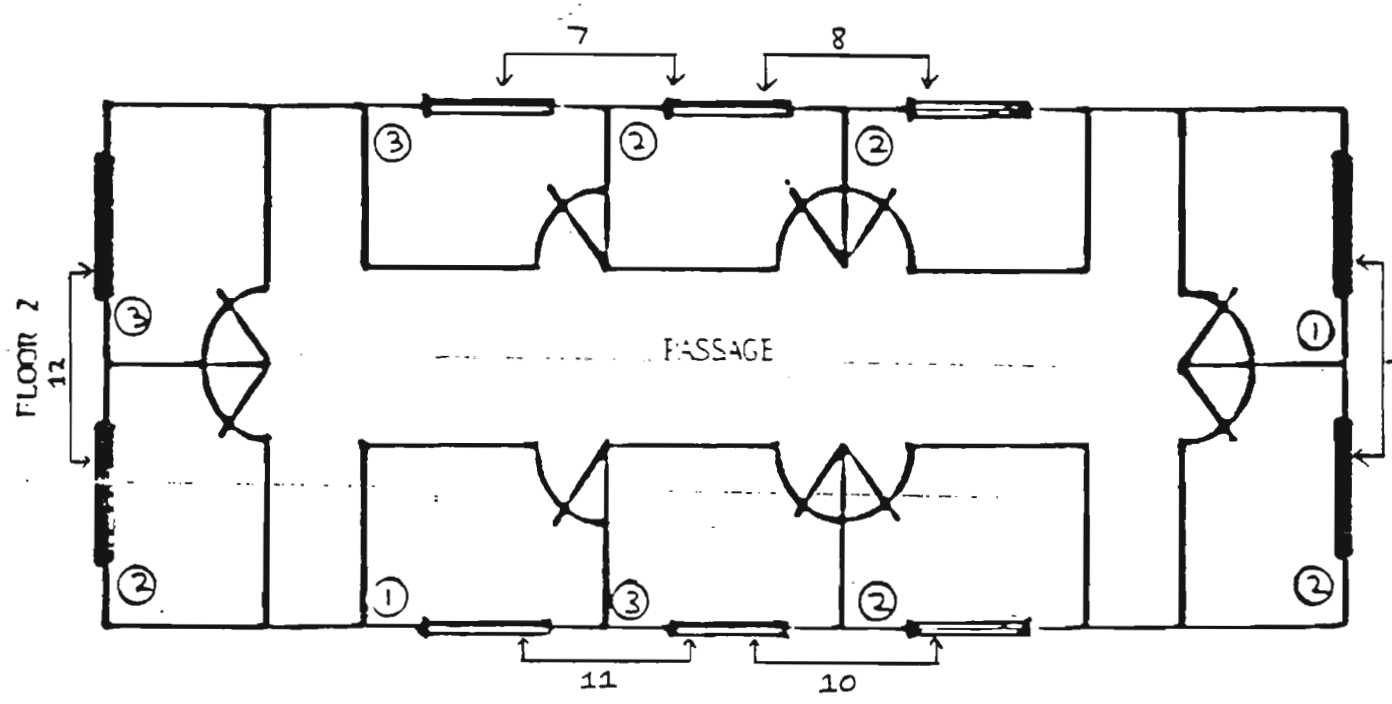
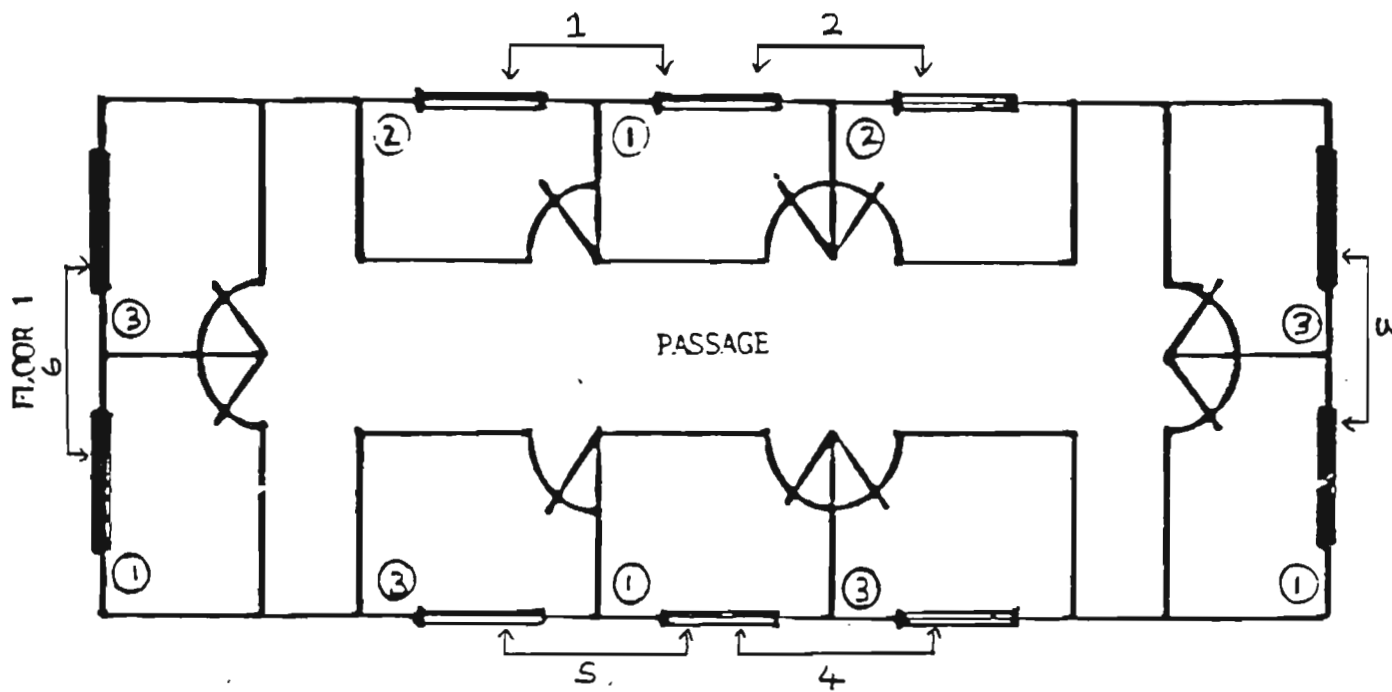
KEY:

- A - Attitude Scale For Black-White Relations
- B - Group-Perception Ladder x 2 ingroup-outgroup variations
- C - Room Allocation Task
- D - Voting Manifestos and Trait Evaluation Scales x 4  
sequence variations

8 x 4 = 32 orders of presentation

F: SCORING SYSTEM MEASURING THE DEGREE OF INTEGRATION





KEY:

1 to 12 - pairs of neighbours scored as either 0 - same race  
or 1 - different races

G: GROUP-PERCEPTION LADDER: COMPUTER PROGRAMME,  
RAW DATA AND STATUS, STABILITY AND LEGITIMACY SCORES

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10 C LADDER PROGRAM
20 DIMENSION RACE(140),ID(140),INGP(140,4),OUTGP(140,4),ISTAB(140)
30 DIMENSION STATUS(140), STAB(140),LEGIT(140,2),IDIF(140,4),
35 X1(140),X2(140)
40 INTEGER RACE,OUTGP,STATUS
50 DO 1 I=1,140
60 1 READ(5,2) RACE(I),ID(I),(INGP(I,J),OUTGP(I,J),J=1,4)
70 2 FORMAT(I1,I2,8I2)
80 DO 10 I=1,140
90 DO 5 J=1,4
100 IDIF(I,J)=INGP(I,J)-OUTGP(I,J)
110 IF(IDIF(I,J).GT.10.OR.IDIF(I,J).LT.-10)IDIF(I,J)=99
120 5 CONTINUE
130 C TO WORK OUT STATUS,STABILITY,&LEGITIMACY
140 X1(I)=FLOAT(IDIF(I,3))
150 X2(I)=FLOAT(IDIF(I,1))
160 IF(RACE(I).EQ. 1) GO TO 9
170 IF(IDIF(I,1).LE. 0) GO TO 6
180 STATUS(I)=1
190 GO TO 7
200 C
210 6 STATUS(I)=77
220 IF(IDIF(I,1).EQ. 99) STATUS(I)=99
230 CONTINUE
240 IF(IDIF(I,3).NE. 99 .AND. IDIF(I,1).NE. 99) GO TO 8
250 STAB(I)=99
260 ISTAB(I)=99
270 GO TO 15
280 C
290 8 IF(IDIF(I,3))11,12,13
300 GO TO 12
310 11 STAB(I)=X1(I)/X2(I)
320 ISTAB(I)=2
330 GO TO 15
340 C
350 13 STAB(I)=X1(I)/X2(I)
360 ISTAB(I)=1
370 IF(STATUS(I).EQ. 77) ISTAB(I)=77
380 IF(IDIF(I,4).NE. 99) GO TO 14
390 LEGIT(I,1)=99
400 LEGIT(I,2)=99
410 GO TO 10
420 14 IF(IDIF(I,4)) 16,17,18
430 GO TO 17
440 17 LEGIT(I,1)=IDIF(I,4)
450 LEGIT(I,2)=2
460 GO TO 20
470 15 LEGIT(I,1)= IDIF(I,4)
480 LEGIT(I,2)=1
490 20 IF(STATUS(I).EQ. 77) LEGIT(I,2)=77
500 CONTINUE
510 GO TO 10
520 9 IF(IDIF(I,1).GE. 0) GO TO 10
530 STATUS(I)=2
540 GO TO 32
550 30 STATUS(I)=77

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PSYC-UDELARE\*DESCP(1),LAD

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530 32 IF(IDIF(I,1) .EQ. 99) STATUS(I)=99
540 CONTINUE
550 IF(IDIF(I,3) .NE. 99 .AND. IDIF(I,1) .NE. 99) GO TO 33
560 STAB(I)=99
570 I STAB(I)=99
580 GO TO 40
590 33 IF(IDIF(I,3)) 34,35,36
600 34 STAB(I)=X1(I)/X2(I)
610 I STAB(I)=1
620 GO TO 40
630 35 GO TO 36
640 36 STAB(I)=X1(I)/X2(I)
650 I STAB(I)=2
660 40 IF(STATUS(I) .EQ. 77) I STAB(I)=77
670 IF (IDIF(I,4) .NE. 99) GO TO 41
680 LEGIT(I,1)=99
690 LEGIT(I,2)=99
700 GO TO 10
710 41 IF(IDIF(I,4)) 42,43,44
720 C
730 C
740 42 LEGIT(I,1)=IDIF(I,4)*(-1)
750 LEGIT(I,2)=1
760 GO TO 45
770 43 GO TO 44
780 44 LEGIT(I,1)=(IDIF(I,4)*(-1))
790 LEGIT(I,2)=2
800 45 IF(STATUS(I) .EQ. 77) LEGIT(I,2)=77
810 10 CONTINUE
820 WRITE(6,60)
830 60 FORMAT(1H1,2X,'ID',1X,'RACE',1X,'PRES',1X,'PAST',2X,'FUT',1X,
840 &'IDEAL',1X,'STATUS',1X,'STABIL',1X,'LEGIT',5X,
850 &'STATUS',1X,'STABIL',1X,'LEGIT'/)
860 DO 100 I=1,140
870 WRITE(6,62) RACE(I),ID(I),RACE(I),(IDIF(I,J),J=1,4),
880 &STATUS(I),I STAB(I),LEGIT(I,2),IDIF(I,1),STAB(I),
890 &LEGIT(I,1)
900 WRITE(13,65) RACE(I),ID(I),RACE(I),(IDIF(I,J),J=1,4),STATUS(I),
910 &I STAB(I),LEGIT(I,2),IDIF(I,1),STAB(I),LEGIT(I,1)
920 100 CONTINUE
930 62 FORMAT(1X,I1,I2,3X,I1,T10,4(2X,I3),3(5X,I2),T54,4X,I3,1X,F7.3,
940 &4X,I3)
950 65 FORMAT(1X,I1,I2,1X,I1,T10,4I3,T20,3I2,I3O,I3,F10.6,I3)
960 STOP
970 END

```

PSYC-UDELARE\*DESCP(1),LAD (ALL)

SUBJ. ID.	PRESENT	PAST	FUTURE	LEGIT	STATUS	STABILITY	LEGIT
1010309021005080808					-6	.500000	0
1020309000806091010					-6	.500000	0
1030506100302090309					-1	7.000000	6
1040001000807000605					-1	-7.000000	-1
1050504030607040707					1	3.000000	0
1060210020903100808					-8	.875000	0
1070308011005051010					-5	.000000	0
1080407020906060505					-3	.000000	0
1090010001001080505					10	.700000	0
1100010001010101010					10	.000000	0
1110505000908041010					0	.000000	0
1120408020608090808					-4	.250000	0
1130505030809041010					0	.000000	0
1140309001001071010					-6	1.000000	0
1150707030905060805					0	.000000	-3
1160307010904060505					-4	.500000	0
1170208001004050707					-6	.166667	0
1180308010705090505					-5	.800000	0
1190305030707070909					-2	.000000	0
1200910000710001000					-1-10	.000000	-10
1210209011003060605					-7	.428571	-1
1220110001005060707					-9	.111111	0
1230410020806091010					-6	.500000	0
1240006001001021010					-6	.166667	0
1250308031004060909					-5	.400000	0
1260107010703000909					-6	-.500000	0
1270006001010051008					-6	-.833333	-2
1280608030509090910					-2	.000000	1
1290308030702050505					-5	.600000	0
1300209010805081010					-7	.428571	0
1310110080609041010					-9	-.555556	0
1320310011005100809					-7	.714286	1
1330407021008051010					-3	-1.000000	0
1340309000703100606					-6	1.166667	0
1350010001005050505					10	.000000	0
1360007020999990310					-7	.000000	7
1370310081005070210					-7	.285714	8
1380409020709080605					-5	-.200000	-1
1390010001010101010					10	.000000	0
1400210011003101010					-8	.875000	0
1410110011005050505					-9	.000000	0
1420509040705070808					-4	.500000	0
1430007000900061010					-7	.857143	0
1440308021008061010					-5	-.400000	0
1450108001005060807					-7	.142857	-1
1460010000500100505					10	1.000000	0
1470110000905100909					-9	.555556	0
1480208090004050505					-6	.166667	0
1490110011002101010					-9	.888889	0
1500110011001090508					-9	.888889	3
1510509040808091010					-4	.250000	0
1520110021006100707					-9	.444444	0
1530509030907080808					-4	.250000	0
1540110011010091010					-9	-.111111	0
1550010001010101010					10	.000000	0

KEY:  
 SUEJ.ID- 100's=Blacks  
 200's=Whites

SUBJ. ID.	PRESENT	PAST	FUTURE	LEGIT	STATUS	STABILITY	LEGIT
1560010001002080505					10	.600000	0
1570408030905071010					-4	.500000	0
1580409030805060909					-5	.200000	0
1590010001009091010					10	.000000	0
1600010001001050505					10	.400000	0
1610510011008081010					-5	.000000	0
1620110001010050505					-9	-.555556	0
1630010001001100808					10	.900000	0
1640008001008031010					-8	-.625000	0
1650510041010101010					-5	.000000	0
1660009001005050505					-9	.000000	0
1670007000708080007					-7	.000000	7
1680006000907021010					-6	-.833333	0
1690310031006080606					-7	.285714	0
1700002040705030505					-2	-1.000000	0
2010704090205060807					3	-.333333	1
2020603070305050606					3	.000000	0
2030703090105061010					4	-.250000	0
2040904100305050505					5	.000000	0
2050804090207060808					4	.250000	0
2060800080008040505					8	.500000	0
2071002100004060908					8	-.250000	1
2080502040107051010					3	.666667	0
2090803100207050606					5	.400000	0
2100805100306060505					3	.000000	0
2110801080108020606					7	.857143	0
2120705080207060908					2	.500000	1
2130802090107061010					6	.166667	0
2141001100005051010					9	.000000	0
2151002100008051010					8	.375000	0
2160703100205050505					4	.000000	0
2171000100005100505					10	-.500000	0
2180404060305051010					0	.000000	0
2190703080204040605					4	.000000	1
2201004100106080908					6	-.333333	1
2210703090105041007					4	.250000	3
2220804100205050909					4	.000000	0
2230804100105080505					4	-.750000	0
2240504060304051010					1	-1.000000	0
2251001100305070505					9	-.222222	0
2260703070206040606					4	.500000	0
2270804070409061010					4	.750000	0
2280805080209060908					3	1.000000	1
2290701050003050505					6	-.333333	0
2300805090407070808					3	.000000	0
2310503060204031010					2	.500000	0
2320702070106041010					5	.400000	0
2330601080107060808					5	.200000	0
2340804090308050806					4	.750000	2
2350603080204041010					3	.000000	0
2360702080106030606					5	.600000	0
2370802070108050707					6	.500000	0
2380906070209080808					3	.333333	0
2390402050103031010					2	.000000	0
2400903100105040806					6	.166667	2

SUBJ. ID.	PRESENT	PAST	FUTURE	LEGIT	STATUS	STABILITY	LEGIT
2410704080306050707					3	.333333	0
2420804090308060808					4	.500000	0
2430503080104000805					2	2.000000	3
2440805090206060802					3	.000000	6
2450704070307051010					3	.666667	0
2460705070205051008					2	.000000	2
2470702070001071010					5	-1.200000	0
2480903080208040808					6	.666667	0
2490902090308041010					7	.571429	0
2500704060107060304					3	.333333	-1
2510804090307050808					4	.500000	0
2521003100005040505					7	.142857	0
2530603050206060808					3	.000000	0
2540702060107040707					5	.600000	0
2550706070207070707					1	.000000	0
2560801090205041010					7	.142857	0
2570602040108061010					4	.500000	0
2580706080507071010					1	.000000	0
2590802090207060808					6	.166667	0
2600704080205060806					3	-.333333	2
2610603060206050909					3	.333333	0
2620704050206060606					3	.000000	0
2631002100109031010					8	.750000	0
2640902090208021010					7	.857143	0
2650906100399081008					3	99.000000	2
2661004100210071009					6	.500000	1
2670804080307050806					4	.500000	2
2680503050205040807					2	.500000	1
2690904090208090808					5	-.200000	0
2701005100309080808					5	.200000	0

H: VOTING PREFERENCES: RAW SCORES AND MEAN INGROUP AND  
OUTGROUP RATINGS



subj.id. raw scores	mean ingp	mean outg
1012314	2.500000	2.500000
1022211	2.500000	2.500000
1032211	2.000000	3.000000
1042113	2.500000	2.500000
1052211	2.500000	2.500000
1062211	2.500000	2.500000
1071423	2.500000	2.500000
1082214	2.500000	2.500000
1092114	3.000000	2.000000
1102112	2.500000	2.500000
1112113	2.500000	2.500000
1121221	2.500000	2.500000
1131124	1.500000	3.500000
1141422	2.500000	2.500000
1151122	2.000000	3.000000
1162314	2.500000	2.500000
1172411	2.000000	3.000000
1182211	2.000000	3.000000
1192314	2.500000	2.500000
1201124	1.500000	3.500000
1212112	2.500000	2.500000
1222314	2.500000	2.500000
1231124	2.000000	3.000000
1242112	2.500000	2.500000
1252213	2.000000	3.000000
1261422	2.500000	2.500000
1271324	2.000000	3.000000
1281321	3.500000	1.500000
1291224	2.500000	2.500000
1301224	2.500000	2.500000
1311322	2.000000	3.000000
1321422	2.500000	2.500000
1331123	1.500000	3.500000
1341221	2.500000	2.500000
1351123	1.500000	3.500000
1361221	3.000000	2.000000
1371224	1.500000	3.500000
1382113	3.500000	1.500000
1392312	3.000000	2.000000
1402213	3.500000	1.500000
1411223	1.500000	3.500000
1421322	2.000000	3.000000
1432213	2.000000	3.000000
1441324	2.500000	2.500000
1451422	2.500000	2.500000
1462412	1.500000	3.500000
1472213	3.500000	1.500000
1481123	1.500000	3.500000
1492412	2.500000	2.500000
1501321	2.500000	2.500000
1512113	3.500000	1.500000
1521423	2.500000	2.500000
1531122	2.000000	3.000000
1542112	3.000000	2.000000
1552413	2.500000	2.500000

subj. id.	raw scores	mean ingp	mean outgp
1561122		2.500000	2.500000
1572211		2.000000	3.000000
1581124		1.500000	3.500000
1591223		1.500000	3.500000
1602412		1.500000	3.500000
1611321		2.500000	2.500000
1621123		2.500000	2.500000
1632211		2.000000	3.000000
1642412		1.500000	3.500000
1651223		1.500000	3.500000
1661423		2.500000	2.500000
1671321		3.500000	1.500000
1681929		1.000000	.000000
1691123		2.500000	2.500000
1701324		2.000000	3.000000
2012114		1.500000	3.500000
2021123		2.500000	2.500000
2032411		3.000000	2.000000
2042114		2.000000	3.000000
2051421		2.000000	3.000000
2062213		3.000000	2.000000
2072113		2.500000	2.500000
2082312		3.500000	1.500000
2092312		2.000000	3.000000
2102213		1.500000	3.500000
2112413		2.500000	2.500000
2121122		2.500000	2.500000
2131929		.000000	.000000
2141123		3.500000	1.500000
2151122		3.000000	2.000000
2161124		3.000000	2.000000
2171122		2.500000	2.500000
2181123		2.500000	2.500000
2191224		2.500000	2.500000
2201223		3.500000	1.500000
2211422		1.500000	3.500000
2222214		2.500000	2.500000
2232213		3.000000	2.000000
2242114		2.000000	3.000000
2252114		2.000000	3.000000
2262113		1.500000	3.500000
2272213		3.000000	2.000000
2282314		2.500000	2.500000
2292112		2.000000	3.000000
2302113		2.500000	2.500000
2311929		.000000	.000000
2321124		3.000000	2.000000
2332312		3.500000	1.500000
2341123		2.500000	2.500000
2352213		3.000000	2.000000
2362113		2.500000	2.500000
2371422		2.500000	2.500000
2381223		2.000000	3.000000
2391221		2.000000	3.000000
2402113		1.500000	3.500000

subj. id.	raw score	mean ingp	mean outgp
2412114		2.000000	3.000000
2421122		2.500000	2.500000
2431122		3.000000	2.000000
2441321		1.500000	3.500000
2451321		2.500000	2.500000
2461421		2.000000	3.000000
2471221		2.000000	3.000000
2481124		3.000000	2.000000
2491422		2.500000	2.500000
2501423		2.000000	3.000000
2511224		2.500000	2.500000
2521122		3.000000	2.000000
2531124		3.000000	2.000000
2541122		3.000000	2.000000
2551123		2.500000	2.500000
2561224		3.500000	1.500000
2571123		2.500000	2.500000
2581221		2.500000	2.500000
2591123		2.500000	2.500000
2601322		3.000000	2.000000
2612114		1.500000	3.500000
2622112		2.500000	2.500000
2632113		1.500000	3.500000
2642412		2.500000	2.500000
2652114		2.000000	3.000000
2662112		2.000000	3.000000
2672113		1.500000	3.500000
2682311		2.500000	2.500000
2691122		3.000000	2.000000
2701122		3.000000	2.000000

I: TRAIT EVALUATIONS: RAW SCORES AND MEAN RATINGS FOR  
INGROUP AND OUTGROUP CANDIDATES

subj.	raw scores	mean ingp	mean outgp
id.			
101	2211123633512567345465315455775736677776	3.944444	5.444444
102	2314445746763335646363444657745356347654	4.722222	4.944444
103	1324716667746443445464763745472444444444	4.888889	4.500000
104	1224666266666636667766736666766766466666	5.722222	5.888889
105	1423726377766356355526542656667263522431	5.055556	4.166667
106	1423717777777711777777431777667777111171	6.000000	4.500000
107	1122516677747433747537763377736676767766	5.166667	5.944444
108	112353644773574777777732757777417312524	5.777778	4.500000
109	1223134224332665777676761766767567212265	4.500000	4.944444
110	241371777477772677677777777777777477746	6.111111	6.611111
111	1224767377764145367513735767777244325646	4.944444	5.111111
112	1324717135777731747737715175756651755737	5.055556	5.000000
113	1223711717711337475477177174474331956747	4.444444	4.583333
114	1123717477773141977677116113131761113711	5.277778	2.555556
115	1324245455655734767665222614766531651446	5.111111	3.944444
116	1122562954444767766677356436263666666666	5.402778	5.111111
117	1322366667477745654566634622641621222632	5.555556	3.333333
118	2413544437645645655466566457465364365666	4.944444	5.166667
119	1122554433333652667676644666655653364456	4.666667	5.000000
120	122399997999999979999999997999999997999	7.000000	7.000000
121	1324736667672653666665772777676444343554	5.500000	5.111111
122	1122723276636774577677661757754564467556	5.500000	5.333333
123	2213761177464471474116764476627761777476	4.333333	5.611111
124	1324571751131617757537111577575444446722	4.388889	4.222222
125	1124456273546626747643262354526261244462	4.833333	3.666667
126	2311335742334261567712462167444174777345	3.944444	4.611111
127	2211531776547714277777445167755711767566	5.222222	5.000000
128	2214777777777717717771717777711717777777	6.000000	5.666667
129	211399999799959999999999999799999999799	6.000000	7.000000
130	2113663766677663145521354233323762777777	4.833333	4.722222
131	2411343554543746577767645377766343553622	5.111111	4.666667
132	23117777777777777777777777777777777777	7.000000	7.000000
133	2412755767775645156643617567777726545554	5.333333	5.333333
134	2413732755556626466666646366656126443552	5.166667	4.444444
135	2412566766667656567667545754633773777433	6.055556	5.000000
136	2314356656535675415655727476457741767676	4.888889	5.555556
137	112353655767653454554525332222622555536	5.000000	3.444444
138	1422626566526222765666696553325766656221	4.777778	4.465278
139	2114663666665767116616179114361222661221	5.055556	2.833333
140	2114274777773773777777714777757717777327	6.111111	5.555556
141	1124742655674444777444253112222424434424	5.055556	2.833333
142	1124766657764255646146245365246756567666	5.166667	5.055556
143	1124715177567631775775435755756735344555	5.222222	4.888889
144	12217665777775437777767767777344177771	6.222222	5.722222
145	1123717377767516646322471623432734767765	4.833333	4.666667
146	2311663566666662766766617466654644456642	5.666667	4.777778
147	2114425771767136565522747377776665367766	4.500000	5.944444
148	1224544555555554455555455354535445435455	4.777778	4.333333
149	2113261767917742777777713527742716577777	5.368056	5.111111
150	1224513417777312443511721142411771777474	3.666667	4.111111
151	2214226535323936566666716667667625526666	4.472222	5.333333
152	1122656666777432624632633636663224636622	4.888889	4.166667
153	2413343656534545465645345455355362545455	4.611111	4.333333
154	231477266667655455556676667777456545555	5.500000	5.777778
155	2112653756636745747766646445534665475667	5.555556	5.166667

subj. id.	raw scores	mean ingp	mean outgp
156	1423355345454276756776444563355535976665	5.055556	4.854167
157	1324627777677526644332652666666345434635	5.055556	4.777777
158	2312662666666656666666222222332266232252	5.722222	2.777778
159	112473777777664677777456335566433444355	6.444444	4.333333
160	1123574244344776676677437115114211114211	5.333333	2.277778
161	1224727676777424766362362123222762777777	5.333333	4.444444
162	2214424747634342421412214224241614746647	3.555556	3.722222
163	2413772777777666776767655677767622115263	6.444444	4.666667
164	1123454455434774244643454354355344534453	4.388889	4.055556
165	2411244624666643554666564244462544443224	4.722222	3.833333
166	2211741746544743477775654147636753777667	5.166667	5.388889
167	142226222225224466666662666666771777777	3.944444	5.944444
168	1129736477777735566756445425534734646524	5.833333	4.277778
169	1422697644617472752547774446416295964417	4.951389	4.460317
170	1122776666256652776776676555665365526664	5.777778	5.222222
201	1322654377546716556555525676666644366644	5.111111	5.111111
202	2214253166756453443533456556645555355666	5.111111	4.166667
203	1322757477667417465454242747622666366567	4.833333	5.333333
204	1223747776756734455355663757777756666666	6.055556	5.388889
205	2312456676555322225567664354742757477357	5.166667	4.611111
206	2411334646354333636653356446355554456434	4.500000	4.222222
207	2412443535555645667666555457465645645665	5.166667	5.055556
208	2411117714712744724744474264511747477777	5.055556	4.111111
209	142166646666651666653553666666566766656	5.444444	5.277778
210	2114434444444445143134444644444544357744	4.388889	3.555556
211	1221523645643655466466452654455534655635	4.555556	4.777778
212	1423526655455436666566533222622324323422	2.888889	5.055556
213	291954565665645545555453544554454455555	4.555556	5.000000
214	1224656466666665666666532223532533634533	3.444444	5.777778
215	2413776777777533234532721222633445356234	3.555556	5.111111
216	1322323364651757767777666776667214434322	4.555556	5.166667
217	1423366126442754747766272122342454244524	3.277778	4.833333
218	2214445456543434545445444345444435544445	4.111111	4.333333
219	1321566456554566666644634535535433524433	3.888889	5.277778
220	1124646666666455666635555434453335544534	4.111111	5.444444
221	1321465646555523667444726475725322527746	4.611111	4.833333
222	1123746676646634546644451546676564234644	4.555556	5.222222
223	1124536446235555666665542663535264455555	4.444444	4.888889
224	1223546555552665567656621522644255265345	3.833333	5.222222
225	1223423454454555524456554656556433334533	4.333333	4.222222
226	1422346236464427375236636466665656666632	5.222222	4.277778
227	1124555476555546777675552667624413336433	4.055556	5.611111
228	1122765227451737767777475746765511125511	4.055556	5.388889
229	1423635577677417375156555767775635266435	5.222222	5.111111
230	2412655453455555545555755434643464235334	4.166667	4.777778
231	1929999999999999999999999999999999999999	.000000	.000000
232	2213666646666656464646446366446226466422	4.277778	5.500000
233	1124763245664754777777436546433473234542	4.000000	5.611111
234	2214446657665454344533624425523456566466	4.500000	4.666667
235	1124335655445434656655466446544343343333	4.000000	4.666667
236	1224636466656657777666633666666623345634	4.666667	5.833333
237	2311542635565734134533223355523766556364	4.333333	4.111111
238	1421766556364644345674656677757733667754	5.777778	5.055556
239	1423465457276554655444525345455652755566	4.722222	4.888889
240	1422356366366635555677554767766354444434	4.888889	5.166667

bj. d.	raw	scores	mean ingp	mean outgp
41	1223545445534544555544445556544544455544		4.555556	4.444444
42	14236664565566666666635111111122111332312		1.555556	5.500000
43	2413665555555523123525534435534333535534		3.888889	4.166667
44	2214551614645524234524613545656534365277		4.611111	3.777778
45	1224747666655225453633324255415357666656		4.500000	4.722222
46	1223445576545355655643534324642664675675		4.722222	4.833333
47	2314436765644442225653647376667467756466		5.722222	4.333333
48	1322647577645362766674717676766235332433		4.500000	5.444444
49	1123555345534435545245354344443332425544		3.666667	4.222222
50	1221315535236322314432636456636256533542		4.444444	3.166667
51	2113544566653723253723231233321745667776		4.166667	4.333333
52	2413551656666544544434515455566432445443		4.166667	4.611111
53	2213645666666454434343345433343545666665		4.500000	4.722222
54	241355665765564555655544434453455555545		4.388889	5.333333
55	2214353747675323153421443324623573566666		4.500000	3.944444
56	2311356656666766366666364345544315535443		3.944444	5.611111
57	2214666666666655556656655555655635565665		5.222222	5.722222
58	2413244735643564356663566477566557575666		5.777778	4.555556
59	1422656467667644666677635455545634555665		4.833333	5.833333
60	1124646567463243634554423323431645656566		4.111111	4.611111
61	2213353656535536555655656567666666345654		5.444444	4.777778
62	2413655656554535667665646357766555256564		5.166667	5.333333
63	2214227627352661275564276414562642275446		4.277778	4.333333
64	211334555354544454343433224532645545555		3.888889	4.111111
65	2312322436443154624546756376755374546375		5.277778	3.777778
66	2314666666766654646655766677677766677676		6.500000	5.666667
67	2214554544555422545546626555563356346465		4.722222	4.388889
68	1422545455535545545544435524553543444533		3.944444	4.555556
69	2413665666775554655455546365543534474545		4.555556	5.444444
70	2413554556545553566555646655667634344534		4.833333	4.944444

J: ROOM ALLOCATION TASK (i) DATA FOR THE RELATIVE NUMBER OF ROOMS  
(ii) WEIGHTED SCORES FOR THE RELATIVE  
DESIRABILITY OF ROOMS  
(iii) INTEGRATION SCORES



Subj.

Id.	(i)	(ii)	(iii)
101	1010	2120	08
102	1109	2219	10
103	1010	2516	10
104	1010	2219	06
105	1010	9999	12
106	1010	2120	05
107	1010	2120	12
108	1010	2120	07
109	1010	1823	09
110	1109	2615	07
111	1109	2120	07
112	1109	2219	11
113	1010	2021	06
114	1010	9999	07
115	1109	2417	10
116	1010	2021	08
117	1010	2021	08
118	1010	2318	09
119	1010	2021	08
120	1010	2219	06
121	1010	2120	07
122	1010	2120	09
123	1010	2120	10
124	1406	3506	08
125	1010	2120	11
126	1010	0999	12
127	1010	2120	09
128	1010	9999	12
129	1010	9999	99
130	1010	2021	07
131	1208	2615	08
132	1010	2120	08
133	0911	2021	10
134	1010	2021	08
135	1010	2516	12
136	0911	1823	05
137	1109	2219	08
138	1208	2615	08
139	1010	2219	05
140	0911	1823	04
141	1010	2021	10
142	1109	2413	12
143	1010	2120	08
144	1010	2219	10
145	1010	2021	08
146	1010	2219	08
147	1010	2219	10
148	1010	1625	12
149	1010	2219	10
150	1010	2120	07
151	1010	2120	08
152	1010	1823	09
153	1010	2120	07
154	1010	1922	10
155	1010	2021	12
156	1208	2417	08

KEY:

Subj. Id.- 100's=blacks

200's=whites

Raw Scores:

(i) No. of Rooms Ingp/Outgp

(ii) Desirability of Rooms Ingp/Outgp

(iii) Integration

Subj.	(i)	(ii)	(iii)
Id.			
157	1010	2021	08
158	1010	1922	12
159	1010	2219	08
160	0911	2021	12
161	1010	9999	99
162	1109	2318	08
163	1010	1823	07
164	1010	2516	07
165	1010	2120	09
166	9999	9999	99
167	0911	1922	07
168	1109	2417	07
169	1010	2120	08
170	1010	1625	12
201	1010	2219	03
202	1010	2021	04
203	1010	1922	10
204	1010	2120	06
205	1010	1922	05
206	1109	2219	10
207	1010	1922	04
208	0812	1724	09
209	1010	1625	12
210	1010	2120	00
211	1109	2417	08
212	1010	2417	07
213	1010	1724	11
214	1010	2120	04
215	1010	2219	10
216	1010	1922	04
217	0911	1823	05
218	1010	2120	03
219	1010	2120	05
220	1010	2021	04
221	1010	2120	08
222	1010	2120	04
223	1307	2714	06
224	1010	2120	04
225	1010	2120	04
226	1010	1823	10
227	1109	2219	08
228	1010	1823	09
229	1010	2120	05
230	1010	2021	08
231	1010	2219	12
232	1010	9999	12
233	1109	2219	05
234	1010	2120	10
235	1010	2120	04
236	1010	2120	08
237	1010	1724	08
238	1010	2516	12
239	1010	2120	04
240	1010	1922	00
241	1010	1823	12
242	1010	2021	08
243	1010	2021	00
244	1010	2120	00
245	1010	2120	08
246	1010	2120	08

Subj.	(i)	(ii)	(iii)
Id.			

247	1010	2021	10
248	1010	2219	06
249	1010	2120	04
250	1505	3209	03
251	1010	2120	09
252	1010	2120	07
253	1010	2120	06
254	1010	2219	08
255	1010	1923	12
256	1010	1625	12
257	1010	2120	06
258	1010	9999	99
259	1010	1823	12
260	1010	2120	00
261	1010	2120	08
262	1010	2021	00
263	1010	2120	03
264	1010	2516	12
265	1010	2318	00
266	1010	2120	06
267	1109	2714	04
268	1010	2516	12
269	0911	1922	11
270	0911	2021	12