CHANGES IN PERCEPTIONS OF OTHERS IN BLACK AND WHITE SOUTH AFRICAN ADOLESCENTS: THE EFFECTS OF PARTICIPATION IN A YOUTH DEVELOPMENT PROGRAMME.

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS, (COUNSELLING PSYCHOLOGY) IN THE DEPARTMENT OF PSYCHOLOGY, UNIVERSITY OF NATAL.

MARGARET GARDNER FERGUSON
PIETERMARITZBURG
JANUARY 1994

ABSTRACT

This study examines the effects of a Sawubona youth development programme which aimed at stereotype reduction and the integration of black and white high school boys. The writer has attempted to clarify person perception, self-concept and the relationship between the two from a social cognitive theoretical perspective. A review and theoretical framework of person perception, including stereotyping and more individuated impression formation, self-concept and the relationship between the two has been provided.

The sample consisted of 84 Standard 9 boys, attending 3 black schools and 3 white schools in the Pietermaritzburg area. The subjects completed a questionnaire and a written description of self and others pretest, post-test and as a follow-up over a period of 9 months. The questionnaires were compiled by Piers-Harris (1967), Coopersmith (1974) and the free description procedure was based on that of Livesley and Bromley (1973). Subjects from the sample were involved in the programme and formed the experimental group and the rest formed the control no-treatment group. The 2 day residential programme was observed and information on follow-up activities was obtained through interviews and observation. The results were analyzed by the following statistical procedures: analysis of variance, multivariate analysis and correlation coefficients. The investigation revealed that

there were no statistically significant results that supported the hypotheses and that the Sawubona Dialogue Programme had not been an effective intervention in changing stereotyping. Some trends were observed and support previous research findings of Livesley and Bromley (1973), Basson (1974) and Prentice (1990); and suggested some evidence of more individuated impression formation. There was some indication of a relationship between self-concept and the perception of others (on some dependent variables) in this study. Self-concept scores increased for all subjects, but showed less increase in the experimental groups suggesting a more realistic assessment of self as a result.

The findings are discussed in terms of the theoretical framework and contrasted with those of other studies. Attention is drawn to the limitations of this study. Some implications for designing intervention programmes are discussed. Issues arising from this project which have relevance for further research into aspects of stereotyping and person perception are indicated.

I hereby declare that this thesis is my own work, that all assistance and sources of information have been acknowledged, and that this work has not been submitted to any other university for the purpose of a higher degree.

M. Ferguson
University of Natal
Pietermaritzburg
1994

ACKNOWLEDGEMENTS

I acknowledge with gratitude the assistance given me by my supervisor, Mr C.J. Basson.

I also wish to thank Dr B.D. Faulds for his assistance with the research design and analysis of this study.

I acknowledge with thanks the assistance of the Sawubona staff in collecting data for this research. My thanks too, to the principals, teachers, parents and students of the schools from which the test sample was drawn, for their willing cooperation.

Finally, my thanks to my husband who has supported my efforts for many years and for his and my daughter's practical assistance.

TABLE OF CONTENTS

CHAPTER 1.
INTRODUCTION

As extensive political and social reforms in South Africa continue following the dismantling of Apartheid, many white schools in Natal have already made a gesture of integration by accepting "Model C" as their educational model. There are many who are concerned about the effects of integration and feel that some preparation for the present is important so that the process of integration can be eased as the country moves from the racism of Apartheid towards democracy. It therefore seemed appropriate to conduct research in an area where positive attempts were being made to promote integration, in the hope that some of the findings, although limited, could be used by the Sawubona Youth Trust in the evaluation of their programme, and possibly generalised for use by educationists and others.

1.1. CONTEXT OF THE RESEARCH

During 1991, Sawubona Youth Trust, a Christian organisation whose general aim it is "to rehabilitate young people from the effects of Apartheid", requested an evaluation of the Dialogue Programme which they were presenting to groups of adolescent black and white high school pupils in the Pietermaritzburg area. The organisation was interested to know what impact the programme had made on the pupils, whether stereotyping had changed as a result and whether Sawubona's other objectives were being accomplished. They had introduced various youth development programmes in 1989 and were involved in activities such as Leadership Training, the Dialogue Programme, Self-Help Employment, and Crisis-Care and Shelter.

The Dialogue Programme aimed to promote racial integration between blacks and whites, in a post-apartheid society. The objectives of the Programme were to make the groups aware of obstacles hindering interpersonal relations; expose prejudiced attitudes, assumptions and behaviour; and to "issue a challenge to the students for positive action against a stereotype mentality".

The rationale for the design of the Dialogue Programme by Sawubona was that with exposure to others' cultural backgrounds and dialogue between the groups, prejudiced attitudes and stereotypes would be changed. The primary component of the programme was a residential weekend at the Sawubona headquarters during which the two groups of eight black and white students spent time in informal, as well as more structured activities. There was an attempt to provide an opportunity for both groups to experience the others' living conditions and school facilities and for the group as a whole to engage in some form of community service.

1.2. INITIAL LIMITATIONS

These were mainly concerned with time constraints, as there was very limited time available before the collection of the data from the first programme and the pressures of the researcher's full time Psychology Master's course work precluded continual involvement with the research. Restricted time was available to participating students who were also not always obtainable for further measurement, particularly in the Black schools. For example, the students were dismissed from school before the end of the final term in 1991 in order to avoid any politically motivated unrest.

1.3. DEFINING THE AREAS OF STUDY

The focus of this research is to investigate an aspect of possible change as a result of participation in the Sawubona Dialogue Programme, rather than an evaluation. This perspective was preferred so that information from the evaluation (Ferguson, 1992), could be extended by a study which aimed to be more fine-grained in its consideration of change. In this way it is hoped that a contribution can be made to interventions which aim to reduce stereotyping and prejudice.

The purpose of this study therefore is to examine the effects of participation in the Sawubona Dialogue Programme on the perception of others, by measuring changes in the perception of self, and how others are perceived, in order to assess indirectly whether less stereotyping has taken place. The general theoretical approach is from a social cognitive perspective and focuses on the specific areas of person perception and self perception in relation to stereotyping, including the role of the self concept in the perception of others.

Theoretical assumptions basic to this study are that: firstly, the self-concept is the mediator of most significant intrapersonal processes and many interpersonal processes including the perception of others (Markus and Wurf, 1987). The process of person perception can be influenced by the self-concept of the perceiver. Secondly, category-based impression formation has priority in the perception of others, however, under certain circumstances, more individuated impression formation is possible and stereotypes can be changed. In other words individuals tend to form impressions of others based on stereotypes and prejudices rather than forming impressions based on others' own specific attributes, although under certain conditions this can be

reversed. Thirdly, that there is a correlation between the perception of others and the self.

In summary, the Sawubona Youth Trust Dialogue Programme was evaluated from March 1991 to December 1991, at the request of the staff of Sawubona (Ferguson, 1992). However, no attempt is made here to evaluate the programme as a whole, rather the focus is on a specific aspect of social cognition. This study will attempt to examine certain aspects of person perception, with a view to establishing, whether the stereotypes of the perception of others of the participating students, have been changed as a result of the programme.

In the following chapter a social cognitive approach to social perception will be discussed. General theoretical approaches to person perception, including a specific theory of impression formation will be focused on to examine categorisation and stereotyping in the South African context. Theories of self perception, the dynamic self-concept and the role of the self-concept in person perception will be examined. Relevant research and literature will be reviewed and integrated with the theoretical discussion in this chapter.

Subsequent chapters will describe the methodology of the research project including the research design, measurement, hypotheses and statistical method. Finally, the results will be reported and discussed; conclusions drawn; criticisms of the study offered and suggestions proposed for further research.

CHAPTER 2.
THEORETICAL FRAMEWORK AND REVIEW OF LITERATURE

The purpose of the following discussion on social cognition and the definition of terms is to clarify for the reader the general theoretical approach to social perception used in this study.

2.1. SOCIAL COGNITION

Brewer (1988, p.1) defines social cognition in broad terms as "the study of the interaction between internal knowledge structures -our mental representations of social objects and events - and new information about a specific person or social occasion." Others have interpreted it rather as an approach or a set of assumptions which guide research in various areas of social psychology, which include person perception, social stereotypes, attitude change and the self (Sherman, Judd and Park, 1989).

Researchers have used terms such as 'social perception' (e.g. Markus, Smith, and Moreland, 1985; Zebrowitz, 1990), 'person perception', 'impression formation', 'social judgment' (Smith and Zarate, 1992) or 'understanding others' interchangeably, all referring to how we 'perceive' or 'cognize' other persons including their attitudes, traits, intentions, emotions, abilities and ideas, as well as their physical characteristics and overt behaviour (Livesley and Bromley, 1973).

Social cognitive approaches to attribution, intergroup relations and traits, and related research in personality will not be included in this study. Although traits are viewed as one of many structures that people use to make sense of others (Fiske, 1993), this study will focus on stereotypes in social cognition.

2.1.1. CLARIFICATION OF TERMS

2.1.1.1. KNOWLEDGE STRUCTURES - SCHEMATA OR STEREOTYPES

The definitions of concepts important to this study are considered, particularly stereotypes, which are viewed as schemata containing a perceiver's beliefs about a target. The relationship between stereotypes and prejudice is briefly considered.

Generally, theory of information processing follows a sequence in which memory is given preeminence and the encoding and storage of information is supposedly affected by knowledge structures. These knowledge structures, which summarise past experience and affect behaviour, have been referred to by various researchers as schemata, schemas, scripts, prototypes, frames and stereotypes (Schneider, 1991). They share many assumptions common to information processing theories and in their broadest sense are cognitive structures posited to guide recall selectively and provide default information to fill in gaps in ongoing processing (Baldwin, 1992). The definition used in this study is that they are theoretical cognitive structures that contain knowledge "about the attributes of a category and the links among those attributes" (Fiske and Pavelchack, 1986). The same authors define stereotypes as schemata containing beliefs that the perceiver holds about a target's attributes "which are assumed to be true on the basis of classifying the target". A further assumption, without direct evidence, is that the target actually possesses those attributes.

Most theorists assume a close relationship between the relevant stereotypes and prejudice (Stroebe and Insko, 1989), and Brewer (1991) asserts that there is a theoretical gap between stereotypes and prejudice, which

still needs to be addressed by social cognition. Fiske and Pavelchack (1986) consider that the most important feature of prejudice is evaluation (Allport,1954) and it is often defined as a negative affective reaction to a group.

2.1.1.2. CATEGORIES

One of the theoretical assumptions on which this research is based is concerned with category-based information processing, so that clarity of the concept of categorisation for the reader is important.

A major focus in cognitive psychology is that of categorisation in which placing events, objects and people into categories is one of the major cognitive tasks that individuals are involved with (Schneider, 1991). Writers such as Allport (1954) and Fiske and Pavelchack (1986) suggest that categorisation is used to simplify the complex task of interpersonal understanding. Fiske and Pavelchack (1986) define categorisation as the process in which a stimulus is identified and classified as a member of its class because of its similarity to the other members of that class. Bruner (cited in Fiske and Pavelchak 1986), suggests that categorisation allows the perceiver to "go beyond the information given" so that impressions of individuals are formed using our 'experience' of others to make subjective inferences and associations (Livesley and Bromley, 1973). There is a pervasive tendency for perceivers to ascribe to the categorised object other attributes associated with the category to which the stimulus input has been assimilated. It is these processes which are likely to introduce bias and stereotyping into the individual's representation and judgements of the stimulus object (McCann, Ostrom, Tyner and Mitchell, 1985).

Briefly, it is posited that the initial process involving these concepts is that once a category is cued, cognition (e.g. stereotypes), affect (e.g. prejudices), and behaviour (e.g. discrimination) will be activated but not necessarily acted on (Devine, 1989; Fiske and Neuberg, 1989). In the discussion on person perception that follows, this process and its relevance to this study will be explored.

2.2. PERSON PERCEPTION - GENERAL THEORETICAL APPROACHES TO THE STUDY OF SOCIAL PERCEPTION

Earlier theorists proposed two major competing approaches to impression formation which were based on the holistic or the elemental forms (Asch, cited in Fiske and Neuberg, 1989). The former (e.g. Asch, Ibid.; Allport, 1954) claimed that individuals form impressions of others based on the social categories that they place them in. The latter approach proposes that impressions are formed by combining the characteristics of others (e.g. Anderson, 1978). Other authors such as Livesley and Bromley (1973) in their seminal research have investigated person perception in childhood and adolescence. More recently, comprehensive and general theories of person perception have been proposed, for example Wyer and Srull's (1986) model which attempts to integrate nearly all aspects of social cognition into a single set of processing and structural principles (Sherman, 1988). Generally, two broad models of person perception have been developed: attribute-based linear models, (e.g. Anderson's (1978, 1988) information integration theory); and schematic models (e.g. Allport, 1954).

2.2.1. CURRENT THEORIES OF IMPRESSION FORMATION

A brief overview of current theories will be presented followed by a more detailed description of Fiske and

Neuberg's (1990) continuum model of impression formation. The theory focuses on categorisation and stereotyping and so will inform the writer's investigation into stereotypes, and the conditions and factors necessary for their change.

Recently, models of impression formation have been proposed that include elements of both attribute-based and schematic approaches; or are exemplar-based (e.g. Smith and Zarate, 1992). In the former approach the two modes of processing will occur depending on a number of factors and circumstances, such as attention, motivation and goals of the perceiver. Both the models of Fiske and Neuberg (1990) and Brewer (1988) emphasise the importance of categorisation and stereotype-based inferences. These are processes which use social category information and exclude an individual's other characteristics in impression formation - referred to as "category-based processes" by Fiske and Neuberg (Ibid). The models propose that priority is given to category-based processes by the perceiver; and only later to the complex impressions formed of an individual's attributes, referred to as "individuating processes" by Fiske and Neuberg (Ibid.). The latter are processes which rely almost exclusively on an individual's characteristics rather than a social category.

2.2.2. THE CONTINUUM MODEL

These processes are the basis of the continuum model (Fiske and Neuberg, 1990) which is the focus of this study as it informs stereotyping and category-based impression formation. The continuum referred to is from category-based (categorising an individual as a member of a social group) to individuating processes (using the attributes of the target) and investigates how attention and interpretation are influenced by information and

motivation through various stages of impression formation.

The reader is referred to Fiske and Neuberg (1990) for a complete presentation of the model and the assumptions on which it is based, but the discussion that follows will focus on the premises that are relevant to this study regarding stereotyping and the conditions necessary for change.

2.2.2.1. MAJOR FEATURES OF THE CONTINUUM MODEL

The first assumption made about impression formation processes in the Fiske and Neuberg (1990) model is that there is a rapid initial categorisation that takes place, based usually on obvious physical cues or other available information. If the target is of no further relevance or interest to the perceiver that will possibly be the only impression formation that occurs. However, if the target is relevant and interesting to the perceiver, then secondly, the model predicts that attention is a key mediating process in possible responses along the rest of the continuum. Attention and effort are necessary if further attribute information, whether confirming, ambiguous, inconsistent or neutral, is to be integrated with other information about the target. Attention and interpretation also mediate the effects of motivation and information (Fiske and Neuberg, 1990).

Thirdly, the model posits that category-based processes will have priority over more individuating processes in impression formation; which is, as already mentioned, an assumption basic to this study. Fiske and Neuberg (1990) propose that social categorisation processes are efficient, adaptive and necessary as individuals attempt to make sense of all the social information that they are exposed to. This suggests that individuals will use

stereotyping as they form impressions of others, which has implications for programmes such as Sawubona's in their attempts to change stereotypes and in the rationale for their interventions. For this reason it is important to consider how more individuated impression formation may occur.

2.2.2.2. CIRCUMSTANCES IN WHICH MORE ATTRIBUTE-BASED INFORMATION PROCESSING OCCURS

When attributes of a target are perceived as inconsistent with the category ascribed to the target, more individuated information processing occurs, whether the inconsistent information is judgment-relevant or not. In this case the category information is not ignored, but if the category cannot be confirmed, individuals will use relatively individuating responses, usually recategorisation, which may include accessing self categories and exemplars. Piecemeal processing will only occur in the absence of any category label or obvious labelling features such as race, gender or age, or if attributes are interpreted as a list that cannot be categorised. However, fully individuated processing seems to be used rarely and only when all else fails. Again the implications for this study are important in that the obvious labelling feature of race was available for all subjects involved in the programme so that according to the model, more individuated information processing would not have occurred.

2.2.2.3. MOTIVATION IN IMPRESSION FORMATION

The model proposes that to answer the question of why perceivers sometimes use attribute-based processes when category-based processes would seem to have priority, or vice versa; the perceiver's motivation, and particularly the perceived interdependence structure needs to be

considered. The perceiver may be mainly motivated by the target, by values that have been internalized, or by a third party. The second feature of interdependence is the criteria for reaching the desired outcome. These together will determine the perceiver's goal in the circumstances.

In summary, the continuum model offers a framework for explaining and understanding the processes involved in categorisation and stereotyping which is relevant to this research. Of most importance is the assumption that category-based processes will have priority since the labelling feature of race is obvious. However, the theory also postulates that the perceiver's motivation and goals can change impression formation.

2.2.3. REVIEW OF RESEARCH

The review of research which follows will consider those areas of relevance to the writer's study including the occurrence of category-based rather than more complex forms of processing; accessibility and automatic categorisation; control of the effects of categorisation and stereotyping and current research in South Africa.

2.2.3.1. CATEGORY AS OPPOSED TO ATTRIBUTE-BASED PROCESSING

Fiske and Neuberg (1990) from their review of the research, conclude that the default option is for information which is consistent with the perceiver's category-based expectations. Complex beliefs about others can be activated without one's awareness (Brewer, 1988; Devine, 1989). Members of an out-group, of a category which is not defined as having the cultural default values, or of a minority, will be processed in terms of category-based processes, and stereotypes will be activated (Smith and Zarate, 1992). However, increasing

evidence suggests that subtypes constitute the basic-level categories that perceivers habitually use (Fiske, 1993). One implication of subtyping is that individuals who do not confirm a global stereotype can be "fenced off" (Allport, 1954 p.23) leaving the overall stereotype intact (Rothbart and Lewis, 1988). According to the model, consistent information is more likely to be recalled because social stereotypes are well developed categories. Inconsistent information is only remembered if the perceiver spends time attending to it (Devine, 1989).

When ambiguous, mixed information is available, subjects' judgments are influenced by stereotypic labels (e.g. Higgins and Bargh, 1987). Fiske and Neuberg (1990) conclude from their review of the literature that mixed information usually allows or reinforces stereotyped responses. If the category label is a strong stereotype such as race, and attributes are interpreted as irrelevant to the category label and the judgment, then category-based responses will be confirmed. When categories are salient, category information is likely to be most important (Pavelchak, 1989). More individuated information processing, is inhibited by time pressures and task complexity (Bodenhausen and Lichtenstein, 1987), by cognitive busyness (Gilbert and Hixon, 1991), by threats to self esteem (Crocker, Thompson, et al., 1987) and by other capacity limitations.

When individuals are asked to make a social judgment and are given a single feature that facilitates categorisation, or a social category label without any other information, they use the label, for example, black, old or schizophrenic. Research reviewed by Fiske and Neuberg (1990) suggests that category information plays a constant role and has a strong influence on impression formation even when individuating processing

occurs, but that the role of attribute information is variable and mediating.

2.2.3.2. ACCESSIBILITY AND AUTOMATIC CATEGORISATION

Race, age and gender, the most pervasive social categories in our culture, are a function of easily perceived physical features and are categorisations that are probably chronically or automatically accessible (Brewer, 1988; Devine, 1989; Fiske, 1993; Fiske and Neuberg, 1989; Schneider, 1991; Srull and Wyer, 1986). For example subjects given ethnic labels are immediately able to access cultural stereotypes (Devine, 1989; Dovidio, Evans, and Tyler, 1986). A category can be chronically accessible, or permanently primed, based on its frequency of activation in the past (Devine, 1989; Fiske, 1990;). When the attributes together strongly suggest an organising category, even though there is no label, subjects will respond by using category-based impression formation. Smith (1988) suggests that certain categories only are processed automatically e.g. white, male, which may be a default category.

2.2.3.3. THE INFLUENCE OF MOTIVATION IN IMPRESSION FORMATION

The results of two related studies, (Neuberg and Fiske, 1987) showed that when the perceiver was given a goal of accurate impression formation; and when perceiver outcome was dependent on the target, individuating processes were apparent, although category-based processes would normally have dominated.

The self is importantly involved in any theory of motivation and Fiske and Neuberg (1990) suggest that impression formation will be regulated by motivation when important self-relevant implications for the perceiver,

are involved in the impression of a particular target (Jones, 1988; Jones and Thibaut, 1958). Self presentation to a third party can also motivate a perceiver to form accurate impressions, for example the fear of negative evaluation from a third party such as peers or authorities. When perceivers are accountable to others and provided they have no evidence of the other's bias, they tend to use more individuating processes (Fiske and Neuberg, 1990).

Perceivers can be their own motivating agents when they live up to their personal internalised values. Evidence for this comes from research which indicates that priming either humanitarian or work ethic values creates greater antiblack or problack attitudes (Katz and Hass, 1988). In a series of studies, Fiske and Von Hendy, (1989) demonstrated that personal values can influence attention and interpretation. Perceivers who were given individuating feedback paid more attention to more informative inconsistent attributes compared to the category-based feedback.

Cooperation, as an outcome dependency, has been viewed as encouraging individuation (e.g. Desforges, Lord, Ramsey, et al., 1991; Gaertner, Mann, Dovidio, et al., 1990). Competition has also been found to encourage more accurate impression formation in some circumstances (Ruscher and Fiske, 1990). However, it has been demonstrated that when groups compete, the salience of membership of the in-group or out-group becomes more important (e.g. Brewer and Kramer, 1985).

Outcome dependency, self presentation and personal values can also however, facilitate category-based processes, depending on the particular interdependence structure. For example, the personal values of Ku Klux Klan members will facilitate the formation of stereotypic impressions

of blacks even when target attributes are overwhelmingly inconsistent. For these perceivers "Prejudice against blacks may be an important component of the self concept" (Fiske and Neuberg, 1990). Most researchers agree that motivation is strikingly important to impression formation.

2.2.3.4. ACCURACY OF IMPRESSION FORMATION

This perspective suggests that people are not irreversibly restricted by their expectancies, stereotypes and prejudices but can be motivated to interact with others so that expectancies are not confirmed and so that they form more data driven impressions (Neuberg, 1989). Self presentation goals can play a significant role in this process (Neuberg, Judice, Virdin, and Carrillo, 1993). Perceivers instructed to categorise a target, form impressions that are different from those who are not instructed (Pavelchak, 1989). Norms of the situation and feedback on personality can be interpreted as instructions (Fiske and Von Hendy, 1992). Highlighting the discrepancies between how one would and should respond to a member of an outgroup can access a self-concept that is unprejudiced (Devine, Monteith, Zuwerink, and Elliot, 1991).

In summary, motivation stems from specific interdependence structures that elicit different goals of impression formation. A goal of impression accuracy created by motivating agents and criteria will lead to more individuating impression formation. On the other hand, category-based impression formation will be evoked by agents and criteria that elicit goals of forming a specific impression or a just-adequate impression.

2.2.4. CONTROL OF THE EFFECTS OF CATEGORISATION AND STEREOTYPING

The pessimistic interpretation of the premise that category-based processes will have priority over more individuated processes, is that people will inevitably stereotype others because they have no other options. However, with the development of models such as: the continuum model (Fiske and Neuberg, 1990), the dual process model (Brewer, 1988) and the dissociation model (Devine, 1989), most recent theorists in the field consider that this is an unnecessarily depressing and inaccurate conclusion. People do use individuation processes and they seem to have some control over these processes in particular circumstances; motivation and attention are the keys in these processes (Fiske, 1993; Fiske and Neuberg, 1990). "A surprising amount of social cognition and perception happens automatically; but people are not numb robots, and they control many of their strategies, through the allocation of attention, according to their goals" (Fiske, 1993).

Some individuals can more or less consciously use their own values and information to inhibit the further processes after automatic categorisation has taken place and therefore reduce prejudice (Devine, 1989). On the other hand recent research has demonstrated that cognitive busyness prevents racial stereotypes from being activated, suggesting that these category-based processes are not necessarily automatic. However, once activated, these stereotypes will be applied (Gilbert and Hixon, 1991). A great deal of conflict between conscious, nonprejudiced beliefs and continued stereotypical thoughts and feelings is involved in efforts to defeat prejudice. The stereotype-based knowledge structures may continue to be activated (Devine, Monteith, Zuwerink, and

Elliot, 1991). "Defeated intellectually, prejudice lingers emotionally" (Allport, 1954, p.328).

Analysis of research suggests that it would be productive to help individuals identify, develop and practice discrepancy-reduction strategies (Devine, 1989). Other examples of strategies proposed in the literature, to undermine negative stereotypes are; "considering the opposite" for bias in social judgment (Lord, Lepper and Preston, 1984); an educational strategy that strengthens egalitarian values (Katz and Hass, 1988); cross categorisation to reduce intergroup conflict (Hewstone, Islam and Judd, 1993); more inclusive recategorisation (Gaertner, Mann, Murrell and Dovidio, 1989) and highly motivated perceivers (Fiske and Neuberg, 1990). A necessary first step is the adoption of non-prejudiced standards; but "fully overcoming the 'prejudice habit' presents a more formidable task and is likely to entail a great deal of internal conflict over a protracted period of time" (Devine, 1989).

Fiske (1993) concludes from her review that perceivers are "motivated tacticians, choosing strategies that suit the immediate circumstances of their capacities, and their need to know."

The general conclusion from research is that information processing will be category-based when contact experiences encourage task-oriented interaction and when "the basis for assignment of roles, status, functions, or subgroup membership in the setting is in any way correlated with category membership" (Brewer, 1988 p. 27). Person-based impressions will probably be formed when interpersonal experiences are more positive.

2.2.5. RELEVANT RESEARCH IN SOUTH AFRICA

According to Duckitt and Foster (1991) research in social psychology in South Africa was generally out of touch with important international trends during the 1970's, such as the social cognitive approaches to stereotyping and prejudice. These authors are also critical of published research in this field by psychologists in South Africa which "has been characterised by major methodological problems such as the use of seriously inadequate measures". However, exceptions such as research in the area of person perception by Basson (1974) has relevance for this study and will be referred to. More recently a wealth of information and data is being collected but not reported, which accounts for the scarcity of relevant published research (Duckitt and Foster, 1991). An exception is Louw-Potgieter, Kamfer and Boy's (1991) research on a Stereotype Reduction Workshop, which may be relevant to the investigation of intervention strategies, however, it is still in progress.

2.2.6. SUMMARY OF RESEARCH REVIEWED

The literature reviewed, indicates that category-based processes will have priority over more individuating processes in impression formation. There is a rapid initial categorisation that takes place, based usually on obvious physical cues such as race, age and gender, social categories that are probably chronically or automatically accessible. Attention and effort are necessary if further attribute information, whether confirming, ambiguous, inconsistent or neutral, is to be integrated with other information about the target. Perceivers can be motivated to interact with others so that they form more data driven impressions and

expectancies are not confirmed. In South Africa there is a scarcity of relevant published research.

2.3. SELF PERCEPTION

The foregoing section on person perception has focused on information processing related to the continuum model but it is important to recognise that this information is processed in accordance with the particular self-concept of the perceiver. An assumption therefore, that is basic to this study is that the self-concept is the mediator of the perception of others. The discussion that follows considers definitions of the self-concept and research that is relevant to this assumption.

"The self-concept provides a framework for the perceptions and organization of our own life experiences" (Markus, Smith and Moreland, 1985). These authors, among others, suggest that the entire person perception process can be influenced by the self-concept. It is the cognitive structure which will be used initially to comprehend the feelings, thoughts and behaviours of other people. Other researchers (e.g. Baldwin, 1992; Burns, 1979) have proposed that many of the same cognitive principles that apply to the perception of others are relevant to self-perception.

2.3.1. SELF-CONCEPT DEFINITION

Conflicting interpretations of the self-concept fall along a continuum from a unidimensional construct (e.g. Coopersmith, 1967) to one of multidimensional facets which are almost independent (e.g. Markus, 1977; Marsh and Shavelson, 1985).

Burns (1979, p.3) defines self-concept as the evaluated beliefs a person holds about himself, and considers that

it has been regarded by many theorists as most important because of "its primacy, centrality, continuity and ubiquity in all aspects of behaviour, mediating as it does both stimulus and response". However, he warns of the controversies surrounding the definitions and the terms used, for example self-concept, self-attitudes and self-esteem have been regarded as synonymous.

The perspective of the self originally proposed by James (1890) and accepted by most current researchers is of a malleable, multifaceted, dynamic entity, rather than a fixed predisposition (e.g. Byrne, 1984; Harter, 1986; Markus, 1977; Markus and Wurf, 1987; Marsh, Barnes, and Hocevar, 1985; Marsh and Shavelson, 1985). It has been defined in terms of hierarchies, theories, goals, prototypes, networks, or schemas (E.g. Anderson, 1978; Epstein, 1973, 1992; Kihlstrom and Cantor, 1988; Markus, 1977, 1990; Markus and Kunda, 1986; Markus and Wurf, 1987; Marsh and Shavelson, 1985; Suls and Greenwald, 1986). However, whatever the theoretical perspective, there is agreement that it is a dynamic, active structure that is involved in all aspects of social information processing (Markus and Wurf, 1987).

Most researchers using a social cognitive approach to self perception have assumed that the self-concept as a structure is a cognitive generalisation of the self that is based on repeated categorisations of one's behaviour, by others and self (Kreitler and Kreitler, 1987). For example Markus (1977) proposed the self-schema, a cognitive structure of interconnected self-related concepts; Epstein (1973, 1992), Gergen (1968, 1987) and Jussim (1986) suggested that the self-concept functions as a self-theory; Cantor and Kihlstrom (1985) developed a model of social intelligence based on Anderson's (1978) information integration theory. Others have assumed that it is a complex construct consisting of domains (Damon

and Hart, 1988; Harter, 1986) attitudes about the self (Rosenberg, 1968, 1986) and concepts such as the public, private and collective, social or possible selves (e.g. Breckler and Greenwald, 1986; James, 1890; Markus and Nurius, 1986; Suls and Greenwald, 1986; Triandis, 1989). Another assumption has been that the self, as confirmed by its functions, its origins and its contents is enmeshed in the social sphere (e.g. Byrne, 1984; Mead, 1968).

Given these many interpretations, the one which is currently accepted by most theorists and which will be used for the purposes of this study defines self-concept as "a set of self-schemas that organise past experiences and are used to recognise and interpret relevant stimuli in the social environment" (Markus, Smith and Moreland, 1985). A self-schema is defined as a "cognitive generalisation about the self, derived from past experience, that organises and guides the processing of self-related information contained in the individual's social experiences" (Markus, 1977). Self-schemas result from the process of acquiring knowledge about the self.

2.3.2. THE DYNAMIC SELF CONCEPT

The focus in this study will be on the multifaceted, dynamic self, and particularly the "working self" (Markus and Kunda, 1986; Markus and Wurf, 1987), and its role in self perception and how others are perceived.

As there is a hierarchical arrangement of many subselves, exemplars, prototypes and abstractions, aspects of the self can be accessible at any given time. The part active at any moment is called the working, on-line or accessible self-concept which is that subset of self-conceptions that is currently active in thought and memory (Cantor and Kihlstrom, 1989; Markus and Kunda,

1986; Markus and Nurius, 1987; Markus and Wurf, 1987). This approach allows for both a stable and a malleable self-concept (Markus and Kunda, 1986) and is much closer to the symbolic interactionist view (e.g. Cooley, 1968; Mead, 1968; Stryker, 1987). Core aspects of the self may be stable but other self-conceptions in the system of the individual will be responsive to self-motives and to changes in social circumstances. The working self-concept consists of "one's core self-conceptions embedded in a context of more tentative self-conceptions that are tied to the immediate social circumstances" (Markus and Kunda, 1986). An individual's sense of self depends on context and relationship (Gergen, 1987; Markus and Kunda, 1986), and the most realistic perspective is to view the self in combination with situational factors, such as the prevailing norms or external information, that bring out different aspects of the self (Fiske and Von Hendy, 1992).

2.3.3. STABILITY AND CHANGE IN THE SELF-CONCEPT

The apparent contradiction of stability and malleability in the self-concept is relevant to this study, particularly as change in the self-concept is one of the dependent variables being investigated, and therefore further research in this area is considered.

Tesser and Campbell (1983) in their review of self-concept research, distinguish between the situational approach which assumes great plasticity in the self with changes being controlled by the present changing circumstances being experienced by the individual. The ontogenetic approach posits that the core of the self is laid down relatively early in life and is greatly resistant to change. There are data supporting both positions. Much research evidence suggests that self conceptions are resistant to change and extremely stable.

Individuals will pursue stability and consistency and will resist any information that contradicts their view of themselves (Markus and Kunda, 1986). Evidence from empirical research involving the self suggests that internal states may guide and bias people's self-relevant behaviour and produce stability in the self-concept partly by means of a number of self maintaining cognitive strategies (e.g. James, 1890; Markus, 1977; Markus and Nurius, 1987; Swann, 1983; Tesser and Campbell, 1983). Evidence from self-esteem research has shown that although one's sense of self-worth is likely to be relatively stable (Coopersmith, 1967; Piers, 1984; Wylie, 1974, 1979); it can also be affected by many different types of self-relevant information (e.g. Tesser and Campbell, 1983). Although people probably fluctuate between stability and change in the self-concept during their lives, the existence of bias in maintaining the self-concept does seem to exist (Andersen, 1987).

The dynamic self-concept including its malleability is assumed to come from its nature which is essentially social (Markus and Kunda, 1986). However, there has not been much research directed towards this aspect of the self-concept. Markus and Kunda (1986) examined the stability of the self-concept in individuals confronted by challenging information. They posit that the self-concept will seem to be malleable because the contents of the working self-concept change in response to the current social situation. Their study demonstrated both the stability and the malleability of the self-concept.

Fiske and Von Hendy (1992) in a series of studies examined the assumption that an individual's sense of self depends on context and relationship (Gergen, 1987; Markus and Kunda, 1986), and that people are motivated by the working self-concept influenced by the current social circumstances. The results showed that the environment

can influence the individual's working self-concept which can be changed by external information.

Both theory and research support the notion of the self-concept as an active process and one that is guided by cognitive and affective reactions (Andersen, 1987) and is capable therefore of change as a result of intervention and current social circumstances.

2.3.4. THE ROLE OF THE SELF-CONCEPT IN PERSON PERCEPTION

The self-concept has been regarded as the mediator of most significant intrapersonal processes and many interpersonal processes including perception of others, however, not many studies have examined the effect of interpersonal events on self-conceptions (Markus and Wurf, 1987). Researchers have presumed that the self is important in information processing and so have proposed that the self-concept is central to the organisation of information about other people (Prentice, 1990). Individuals shape and are shaped by social interactions and the self-concept is the framework by which it is suggested that the interpretation of social experiences is guided, and participation in these experiences is regulated. Baldwin (1992) in his review emphasises the interrelation of self, personality and the interpersonal world. According to Tice (1992) research has demonstrated that interpersonal context is important in self-concept change.

A wide range of psychological theory has been concerned with this relation between self-perception and other perception (Markus, Smith and Moreland, 1985). Many of the earliest theorists recognised the mutual and reciprocal influence between the self-concept and the perception of others (e.g. Baldwin, 1968; Basson, 1974; Cooley, 1968; Epstein, 1973; James, 1890, 1968; Jones and

Thibaut, 1958; Livesley and Bromley, 1973; Mead, 1968; Sullivan, 1968). It would seem that the literature supports the suggestion that there should be a relationship between how an individual perceives himself and how he forms impressions of others. However, although it is accepted that the self-concept has some effect on the perception of others, "the precise nature of the contact between self-perception and the perception of other people remains something of a mystery" (Markus, Smith and Moreland, 1985). These authors however, conclude as a result of their analysis of the role of the self-concept in social perception that it is "one of the most powerful structures in the psychological field".

2.4. SUMMARY OF RESEARCH REVIEWED

In summary, the literature reviewed in the field of person perception and focusing on stereotyping, indicates that: category-based processes or stereotyping will have priority over more individuating processes in impression formation. Initially there is a rapid categorisation, which is based usually on obvious physical cues. Attention and effort are necessary if further attribute information is to be integrated with other information about the target. Perceivers can be motivated to interact with others so that expectancies are not confirmed and so that they form more data driven impressions.

The self perception research reviewed posits that the self-concept is a dynamic, active structure that is involved in all aspects of social information processing. The notion of the working self-concept accounts for the apparent contradiction of the stability and malleability of the self-concept. The entire person perception process can be influenced by the self-concept and there should be a relationship between how an individual perceives himself and how he forms impressions of others.

The literature reviewed has relevance for this study in that it proposes a theoretical framework for person perception and stereotyping and suggests the conditions that are necessary for more individuated impression formation. It also indicates a strong relationship between the self-concept and the perception of others. This is clearly of importance in evaluating the Sawubona dialogue programmes in their aim to change attitudes towards others and reduce stereotyping, so encouraging more individuated impression formation.

CHAPTER 3.
RESEARCH METHODOLOGY

3.1. RESEARCH DESIGN

Sawubona Youth Trust had requested an evaluation of the effectiveness of their Dialogue Programme. The aim of this research was to investigate whether stereotyping in the impression formation of black and white adolescent boys can be changed as the result of participation in the Programme. A free response method and self-concept scales were used to measure dimensions of the perception of others and self perception.

3.1.1. THE SAMPLE

Kerlinger (1986, p.315) suggests that when randomisation is not possible, an effort should be made to use subjects from the same population. Standard 9 pupils, had previously volunteered, or were selected by the school, to participate in three Dialogue Programmes or to assist in the research as controls, so that self-selection into the sample was operating and it was not possible to select subjects strictly at random nor to assign them to groups at random (Kerlinger, 1986). However, it is recognised that randomisation is advisable in order to control independent variables adequately. For this reason, control and experimental groups were drawn from the same classes at each school i.e. the study was ex post facto rather than experimental.

A total of 84 Standard 9 boys was tested. The planned sample was drawn from six high schools in the Pietermaritzburg area and consisted of a group of eight white pupils and eight black pupils who formed the experimental group and eight white and eight black pupils who formed the control group from each of the schools.

The mean age of the group was 16 with a range of 14 to 21 years and a standard deviation of 1.2. Sex was held constant as previous studies have shown that this variable is significantly related to person perception (Livesley and Bromley, 1973). Subjects represented a wide range of socioeconomic backgrounds and attended a variety of schools including community-based state schools and an expensive private school. The planned number of subjects was 8 pupils per group, per session, a total of 96. The following table summarises the number of pupils who actually participated.

Table 1. Number of pupils who participated in the research

	Subjects	Experimental	Control
Session 1	black pupils	8	8
Session 1	white pupils	5	8
Programme Session 2	black pupils	8	6
Session 2	white pupils	8	8
Session 3	black pupils	7	3
Session 3	white pupils	8	7
TOTAL	84	44	40

3.1.2 THE PROGRAMME

Sawubona Youth Trust is a Christian organisation whose general aim is "to rehabilitate young people from the effects of Apartheid" and to promote racial integration in a post-apartheid society. The Dialogue Programme,

initially implemented in 1989, were designed to achieve Sawubona's stated objectives of:

"making groups aware of obstacles hindering interpersonal relations";
"exposing prejudiced attitudes, assumptions and behaviour";
"issuing a challenge to individuals to take positive action against a stereotype mentality".

The programme attempted to provide an opportunity for both groups of black and white adolescents to experience the others' cultural backgrounds through dialogue. The programme consisted of separate pre-briefing and de-briefing sessions, a week prior to and a week after, the residential weekend. During the weekend at the Sawubona headquarters, subjects were involved in informal as well as more structured activities organised by the Sawubona staff and they engaged in some form of community service in one of the townships e.g. painting the interior of a children's home. Examples of other activities include structured discussions on relevant topics such as the violence in the townships and white and black education, a visit to the township schools and homes and breaks for informal interaction such as music and games in the students quarters, with two of the Sawubona staff. (A more detailed outline of a programme is provided in appendix A.)

Two Sawubona staff members, a young Australian girl, with a B.Sc degree, who was funded by a Christian mission in Australia, and a young Zulu man with formal schooling up to Standard 8 level, were responsible for the planning and organisation of the Dialogue Programme. Neither of them had experienced any formal training in teaching or related fields, but the director of Sawubona was a trained teacher with some teaching experience. Six or

seven staff members were usually present for the residential weekend, four of them as facilitators, with 16 or sometimes fewer participants. There were some variations in the Programme depending on specific requests made by the participants and on the availability of resources; but the basic format remained constant. The researcher remained an observer during these sessions, collecting data.

3.1.3. TEST PROCEDURE

Table 2. Research Design

Pretest	Programme: 1 2 and 3	Post-test	Follow-up
Experimental and control groups	Experimental groups	Experimental and control groups	Experimental and control groups

Testing was conducted in three sessions. The pretest data was collected where possible during the pre-briefing session at the pupils' schools, usually a week previous to the residential weekend, and the post-test data during the debriefing sessions usually a week later. The third and final session was follow-up testing, conducted six months after the initial programmes (Table 2.). Most of the data was collected by the researcher, but as a total of eighteen testing sessions was attempted at different venues, Sawubona staff members were also used as testers because of logistic and time constraints. They were given training by the researcher, observed a testing session conducted by the researcher and were themselves observed and controlled for "consistency" as far as possible. This training and observation involved approximately 6 hours.

The data collection was completed in November of 1991. However, circumstances such as the dismissal of black students from schools before term end because of political unrest and the researcher's own course work and

examinations allowed for only one school to be measured at follow-up.

At the start of the first testing session cooperation of the subjects was solicited and included an explanation by the researcher of the purpose of the measurements as an evaluation of the Dialogue Programme. The control and experimental groups at each school were asked initially, to complete the Piers-Harris Children's Self-Concept Scale (Piers-Harris). The Piers-Harris has been used extensively by many researchers and appears to be the foremost children's self-concept measure currently available (e.g. Burns, 1979; Epstein, 1985; Harter, 1986; Jeske, 1985). The instructions were read by the researcher and the subjects were encouraged to ask for assistance if necessary when completing the scale. This was to allow for those Zulu speakers who might have difficulty with some of the English, for example Americanisms such as"pep".

Once the scale was completed, a free response method of assessing the subjects' content and organisation of self and others was used. This method is based on the one used by Livesley and Bromley (1973) and others more recently (E.g. Basson, 1974; Park, 1986; Prentice, 1990; Yardley, 1987) and advocated by Wiley (1989) and Burns (1979). It was selected because it is a non-reactive technique and allows subjects to respond in a "natural" way to perceptions of themselves and others. Other advantages of this method will be discussed below and further information is available in Livesley and Bromley (1973).

Subjects were handed the free description sheet. (appendix B.). Instructions were: "Write a description of yourself first, then a description of a boy of another race and then a girl of another race. You should not take

more than four minutes for each description." No further instructions or assistance was given.

The post-test used the same instruments and procedures. The follow-up measures were the same with the exception of the substitution of the Coopersmith Self Esteem Inventory (SEI) for the Piers-Harris. The SEI was used because it has a high correlation with the Piers-Harris ($r = .85$; Piers, 1984), and resembles the Piers-Harris in format and age range.

The subjects were also given letters requesting permission from their parents to be involved in the research; and a biographical questionnaire - including: age, sex, standard, school, name, father's occupation, mother's occupation, number of siblings, position in family and religious affiliation (appendix C).

This completed the test procedure and each session lasted for a total of 30 to 45 minutes.

3.1.4. SCORING PROCEDURES

Instructions for scoring procedures for the Piers-Harris and the SEI given in the manuals were followed so only the procedure for the content analysis of the free descriptions is described in detail in the following section.

3.1.4.1. FREE DESCRIPTIONS

Content analyses of the 438 written descriptions were carried out, in which three main areas were investigated:

3.1.4.1.1. Statement fluency

The descriptions were analysed into statements and these were counted. The definition of a statement was taken

from Livesley and Bromley (1973, p.98) "one element or idea referring directly or indirectly to the stimulus person, or to some other person, since some of the descriptions contained statements which did not refer to the stimulus person".

3.1.4.1.2. Peripheral as opposed to Central statements
Statements were categorised as either peripheral (non-psychological) or central (psychological) in this stage of content analysis, following Livesley and Bromley's, (1973) coding system. Peripheral statements refer to the external qualities of a person and his surroundings. Central statements are more abstract and generalised and refer to inner, psychological qualities (Ibid, p.107). Their scoring system was used to code statements as central or peripheral using the following qualities:
Peripheral statements included:
Appearance - facial features, physique, clothing.
General information and identity - name, age, sex, residence.
Routine habits and activities.
Actual incidents.
Possessions.
Life history - specific details.
Likes and dislikes.
Social roles.
Kinship and social relationships.
Central statements included:
Personality traits - for example, kind, helpful.
General habits.
Motives, needs and values - for example, wants to succeed. Attitude and orientation - for example, very religious.

Categorisation reliability was examined by inter-judge coding as suggested by Livesley and Bromley (1973) and Basson (1974). Percentage agreement was ascertained

between the researcher and an Honours post-graduate psychology student. Both statement fluency and central versus peripheral statement categorisation showed 85.6% agreement using 11% of the descriptions.

3.1.4.1.3. Positive, Negative and Neutral statements

The final stage of the content analysis involved examining the statements and coding them as positive, negative or neutral as they reflected the perception of the stimulus person by the subject. This stage of the content analysis was not based on any previously documented method in the literature known to the writer. However, attitude theory which uses a social cognitive perspective and according to Pratkanis (1989) is similar to the model of person perception proposed by Fiske and Pavelchak (1986), could be used as a guide in this. For example, Pratkanis (1989) defines attitudes as "a person's evaluation of an object of thought", and suggests that positive attitudes result in positive feelings, thoughts and behaviours towards an object. Conversely, negative attitudes will produce the opposite response. Therefore, coding statements in this way should at the least allow access to the thoughts of the subjects concerning the target person which reflect their attitudes and stereotypical thinking.

The method is probably best illustrated by examples of the categorisation used. Positive statements were: "Very trustworthy, honest"; "Doesn't complain"; neutral statements were: "Short hair"; "She may be rather tall with small eyes and blond hair"; negative statements were: "what is bad about me is that I can easily get angry"; "they couldn't stop finding something silly to laugh at"; "On the whole they annoy me tremendously". A special effort was made to be aware of subjectivity at this stage and categorisation reliability was examined by inter-judge coding. Percentage agreement between the

researcher and one judge (as described above) was 73.3% using 11% of the material for positive, neutral and negative statements.

3.2. MEASUREMENT

A general issue which is relevant to measurement in this area of social cognition is the non-reactive approach. This is discussed in relation to the techniques used in this study prior to other main issues which need to be considered, such as what instruments should be used; what the requirements of a suitable instrument are; and the factors to be considered when choosing an instrument.

Research should be particularly sensitive to the issue of reactivity, which is in essence, that measuring subjects changes them, so that the changes that are observed would not have been found otherwise (Aronson, Brewer, and Carlsmith, 1989). This is particularly the case with the measurement of controversial attitudes (Kerlinger, 1989). Both sets of authors mentioned above recommend the use of indirect assessment techniques to counteract reactivity, particularly for the measurement of stereotypes. It has also been claimed that questionnaires as measures of prejudice, because of their reactive nature, tend to reflect subjects' self-presentational efforts to create a socially desirable image (Devine, 1989).

In advocating a non-reactive approach, McGuire and McGuire (1986) suggest that open-ended measures such as self and other descriptions are better alternatives. They criticise the usual reactive methods which limit subjects to describing themselves or others on some dimension chosen by the researcher and consider that subjects should be allowed to choose the dimensions on which to describe themselves or others. "Such open-ended descriptions are more laborious to analyze but they yield

important additional information providing an as-is picture of how the stimulus is actually perceived in the perceiver's own terms, rather than providing only hypothetical as-if depictions in the researcher's terms as with the usual reactive approaches" (McGuire and McGuire, 1986).

Another issue of general relevance to measurement in this study is that the theory informing it is fine-grained (Fiske, 1991) whereas most of the available measurement instruments tend to be fairly gross (Wylie, 1989). The latter author has proposed that "some form of self-report appears to be the most appropriate (perhaps the only) way to try to index self-concepts" and presumably such a statement could equally refer to the measurement of the perception of others.

For these reasons, and bearing the non-reactive approach in mind, it was decided to use open-ended free description techniques as advocated also by Basson (1974), Gordon (1968), Livesley and Bromley (1973), Oyserman and Markus (1990), Park (1986), Prentice (1990) and Yardley (1987) amongst others; and a self-concept scale (Coopersmith 1975 and Piers-Harris, 1969) as measures of person perception and change.

The use of a direct measure of racial attitudes, for example, the Subtle Racism Scale (Duckitt, 1990), was also considered. This scale developed for use in South Africa, is claimed to be more subtle and indirect in its assessment of anti-black racial prejudice and highly reliable compared to other traditional prejudice scales (Duckitt, 1991, 1993). It was proposed as a measure for this research but was not used, since it was not published until late in the year when the students were no longer accessible because of examinations and other commitments.

In the sections that follow the reasons for selection of the specific instruments for this study are discussed.

3.2.1. FREE SELF AND OTHER DESCRIPTIONS

For Livesley and Bromley (1973) the simplest method of eliciting the terms people use to categorise and conceptualise others, is to apply content analysis to descriptions of others. Other relevant advantages that they mention are that subjects have a great deal of choice to respond freely and therefore act in a "relatively natural fashion" and that experimenter bias in relation to person perception and personality will be reduced.

The disadvantages are that researchers may impose their own ideas to support hypotheses in analysing the data. This method relies on the verbal skills of the subject and the ability to communicate judgments which are normally nonverbal. The individual who is more articulate will make finer discriminations in impression formation. Livesley and Bromley (1973) also note that many aspects of impression formation are automatic so that free descriptions will not necessarily provide complete information. However, they particularly advocate the method for children, in preference to other methods such as Q sorts, ratings, the twenty statements test (cited in Ogilvie and Ashmore, 1991) or the Role Construct Repertory Test (Kelly, 1955), in that it is easily understood and overcomes the difficulties that a child's small vocabulary might cause. Although the subjects in this study were adolescents, many of them nevertheless, would have small English vocabularies and difficulty with comprehension so that this was another relevant consideration in selecting this method.

Pelham (1991) writes that a significant problem with many measures of self-concept is that they tap dimensions of the self that have little meaning to many research participants. He suggests that the use of free descriptions is one solution to this problem. Wylie (1989) while agreeing that this kind of open-ended approach might produce valuable information about self-concepts, warns that there are particular threats to construct validity which need attention if this method is used. She warns that until more reliability and validity information is available results should be interpreted bearing these important cautions in mind.

3.2.2. CONTENT ANALYSIS

The method is objective and systematic which means that it is a formal method, where rules are followed according to predetermined plans and applied consistently and thoroughly (Kerlinger, 1989). It is a useful, unobtrusive and non-reactive research technique which is ideal for looking at the subjective world (Holsti, 1969).

The disadvantages are those discussed previously; of the accuracy of the analysis depending on the scorer's interpretation so there is a margin for error; that the data may not be a valid statement because certain motives or feelings may be inaccessible (Holsti, 1969). It is important to develop rules for categorising and well-defined categories so that the problem of reliability is eliminated as far as possible (Livesley and Bromley, 1973). For this reason, the method used in this study, including the selection of categories, was based on that used by Livesley and Bromley (Ibid.) and Basson (1974).

3.2.3. SELF-CONCEPT MEASUREMENT

Wylie (1989), in her recently updated review of measures of self-concept concludes that it is still true that part of the difficulty of establishing and evaluating the psychometric adequacy of measures of self-concept "lies in the vague state of theorizing in the self-concept domain". Harter (1986) agrees and warns that the measures used must be sufficiently sensitive and psychometrically sound.

Most researchers currently are concerned that the dynamic multi-faceted nature of the self-concept should be considered in measurement (e.g. Byrne, 1984; Harter, 1986, 1990; Markus and Kunda, 1986; Marsh and Shavelson, 1985). Marsh and Shavelson (1985), and Marsh (1986) are critical of research that describes self-concept with "a single score that is called overall, total or general self-concept" which is a "dubious practice" and suggest that it has led to many of the contradictory findings in self-concept research. Nevertheless, they accept that both theoretically and practically the construct of a general self-concept, such as a total score from the Piers-Harris, is important.

This study has therefore, attempted to use the self description which the subject "is willing and able to give us in order to make inferences concerning his inner experience" (Gordon, 1968), and to assess a general self-concept using the Piers-Harris pre- and post-test, and the SEI as a follow-up instrument.

3.2.3.1. THE PIERS-HARRIS CHILDREN'S SELF-CONCEPT SCALE

The definition of self-concept as assessed by the Pier-Harris is "a relatively stable set of self-attitudes reflecting both a description and an evaluation of one's

own behavior and attributes" (Piers, 1984 p.1) and falls between the unidimensional and multidimensional approaches to self-concept (Harter, 1986). Piers (1984) claims that she agrees with a multifaceted hierarchical view of self-concept but that "the major function of the scale is to provide a global index of self-concept" (p.3) and that one of its primary purposes is as a research instrument.

The Piers-Harris was selected because it has been used extensively for research and is a psychometrically adequate instrument whose usefulness in research has been documented (e.g. Burns, 1979; Epstein, 1985; Harter, 1986; Jeske, 1985; Marsh and Shavelson, 1985; Wylie, 1989). Further information on its uses including specialised populations and other ethnic groups is available from the Revised Manual (Piers, 1984). Piers (1984) cautions that the Piers-Harris measures a relatively stable self-concept so that there may not be any significant differences if change is examined after a brief intervention "e.g. a one-week camping experience" (p.5). It has been shown to correlate positively with the SEI (Piers, 1984) which is a popular scale in South African cross-cultural research (Howcroft, 1990). It is easily administered and scored and is a relatively quick and easy scale to complete. The relative simplicity of the language level is a further advantage, as half of the subjects were Zulu-speaking and might have difficulty with English.

This scale consists of 80 items equally divided between positive and negative forms and between high and low reflections of the self-concept. The subject is asked to indicate whether each statement applies to him using a dichotomous "yes" or "no" response. The scoring key was used to obtain a total score. Items are scored in the

direction of positive self-concept so the higher the score the more positive the assessed self-concept.

3.2.3.2. THE COOPERSMITH SELF ESTEEM INVENTORY

Although Coopersmith (1967) is not concerned with a multidimensional approach to self-esteem, Burns (1979) suggests that a global self-esteem measure can be obtained quite validly from the SEI inventory.

This is a widely used rating scale of self esteem that was used six months after the post-test as a follow-up, as an alternative to the Piers-Harris. The SEI resembles the Piers-Harris in format and age range and can be used with all ethnic groups (Coopersmith, 1981). A total score is calculated from the responses of either "Like Me" or "Unlike Me" for 25 statements. The higher the score the more positive the assessed self esteem. The Adult Form for 16 year olds and older, was the scale used, which has a correlation of .80 and higher with the School Form from which it was adapted (Coopersmith, 1981) and a test-retest reliability over a 5 week period of 0.88 (Burns, 1979).

3.3. HYPOTHESES

The purpose of this study is to examine the effects of participation in the Sawubona Dialogue Programmes on stereotyping, by measuring changes in the perception of others and self, in order to assess indirectly whether more individuated impression formation has taken place. The assumptions underlying the study have already been mentioned in section 1.3.

According to Livesley and Bromley (1973) the number of central statements will increase and descriptions will be longer when subjects are liked rather than disliked and

suggest that as a result more individuated impression formation has taken place. The reason for this they suggest, is that a liked person will probably disclose more of himself so that the subjects will have better and more evidence for making inferences about his fundamental attributes. From their review these authors also concluded that authoritarians use more central statements than do non-authoritarians. For the purposes of this study it is assumed that stereotyping will have been reduced as a result of participation in the dialogue programme if there are fewer peripheral statements in the descriptions of persons of another race of the experimental groups compared with the control groups. It follows also from the above, that the more familiar the subjects are with others (e.g. Prentice, 1990) the greater the fluency - the number of statements - and also the more individuated the category formation, i.e. the fluency of the descriptions of the experimental groups should increase.

A more direct measure is the frequency of positive, neutral and negative statements, the assumption being that the experimental groups should show an increase in positive statements of themselves and others post-test, and compared with the control groups, if their perception of others is generally more positive and more individuated impression formation has occurred. Related to this is the measure of self-concept which should also show an increase, as it is the mediator of the person perception process, including the perception of others and the self. If the self-concept scores improve, the assumption is that other dimensions and scores should also improve.

Accordingly the hypotheses were that as a result of participation in the dialogue programme:

3.3.1.: experimental groups would tend to show more individuated impression formation, compared with the control groups i.e. experimental groups would have more central than peripheral statements in their descriptions post-test, than control groups.

3.3.2.: experimental groups would show significant increases on the post-test measures of self-concept compared with the control groups.

3.3.3.: experimental groups would show increases in fluency compared to control groups, i.e. descriptions will contain more statements, as a result of participation in the programme.

3.3.4.: experimental groups would tend to use more positive than negative and neutral statements in their descriptions post-test, compared to control groups.

3.3.5.: experimental groups would use fewer negative statements in their descriptions than the control groups.

3.3.6.: there would be a positive correlation between self-concept and person perception.

3.4. STATISTICAL METHOD

The research design of the examination of person perception involved a 3 x 2 x 2 factorial design (i.e. sessions (programmes) by race of subjects (white\black) by groups (experimental\control) and could be referred to as a mixed factorial design as it is a partial within-subjects design and includes between-subjects (Keppel and Saufley, 1980). The basic statistical method used was

Analysis of Variance (ANOVA). A Multivariate Analysis of Variance (MANOVA) was also computed to provide further information on interactions between the dependent and independent variables, since more than one dependent variable was included (Kerlinger, 1989). This was a repeated measures design as the subjects each wrote six descriptions (3 pretest and 3 post-test) so that variations arising from differences between subjects were reduced. Livesley and Bromley (1973) described this ANOVA design with repeated measures that was used to examine the effects of the main variable on:

the Piers-Harris scores
the fluency of statements
the number of central statements used
the number of peripheral statements used
the number of positive statements used
the number of negative statements used
the number of neutral statements used.

Pearson's product-moment correlation coefficients were computed between each dependant variable in order to clarify the relationship between the perception of others and self-concept. These were calculated for the entire sample pretest and the experimental and control groups.

These formed the statistical methods used to test the significance of within and between subjects variables.

CHAPTER 4.
RESULTS.

In this chapter summaries of the results of this study which has investigated some aspects of social perception, will be presented, including the changes pre- and post-test between the experimental and control groups, and briefly, further results of interest to the hypotheses of this research. The reader is referred to Appendices D, E and F for more complete analyses of data including analyses of variance (ANOVA), means tables and a correlation coefficient matrix. All other analyses are available from the writer on request.

4.1. CHANGE IN RESPONSES BETWEEN PRETEST AND POST-TEST

The following tables are a summary of the data and analyses relevant to the main independent variable (the Sawubona Dialogue Programme) in this study. They summarise the means, pre- and post-test of the experimental and control groups, and the change means of all the dependent variables relevant to self perception and perception of others. Those results that are statistically significant or nearing significance are also noted and discussed below.

4.1.1. SELF PERCEPTION

Key for Tables 3, 4 and 5.

Exp	: Experimental Group
Cont	: Control Group
Periph	: Peripheral Statements
Piers-H	: Piers-Harris
S. D.	: Standard Deviation
Signif	: Level of significance
*	: Statistically Significant - * $p < 0,05$

Table 3. PERCEPTION OF SELF: Summary of the experimental and control group means pre-and post-test; and change score means, standard deviations and level of significance.

	PRETEST		POST-TEST		CHANGE				SIGNIF
Measure	Exp	Control	Exp	Control	Exp Change	Exp S.D.	Control change	Control S.D.	Signif
Piers-H	63.348	60.236	64.976	64.266	-1.595	3.104	-3.741	4.319	.062
Fluency	9.381	8.378	9.400	8.500	-.230	5.248	0.000	3.544	.887
Periph	3.452	2.973	2.200	2.928	1.256	2.541	.115	2.320	.069
Central	5.928	5.405	7.200	5.571	-1.487	4.260	-.115	2.970	.177
Positive	4.881	4.216	5.575	4.329	-.871	3.163	-.192	2.561	.391
Negative	.452	.756	.875	.607	.461	1.603	.307	1.123	.039*
Neutral	4.023	3.405	2.925	3.500	1.102	2.807	-.115	2.422	.041*

a) The ANOVA (appendix D) indicates that the difference between the Piers-Harris means is not statistically significant ($F=3.620$; $p<0.062$). The difference between the means was nearing significance and showed an increase in self-concept scores. However, the experimental group indicated less change than the controls.

b) Negative and neutral attitude to self were the only change effects which reached a level of statistical significance ($F=6.268$, $p<0.015$; $F=5.824$, $p<0.019$) according to ANOVAs (appendix D) computed for the change scores for the experimental and control groups.

c) Both the means for peripheral and central statements, although not statistically significant ($F=3.421$, $p<0.069$; $F=1.867$, $p<0.177$), indicated a tendency to decrease on the former and increase on the latter, in the experimental group compared to the control (appendix D).

4.1.2. PERCEPTION OF OTHERS

Table 4. PERCEPTION OF A BOY OF ANOTHER RACE: Summary of experimental and control group means pre-and post-test; and change means, standard deviations and level of significance.

	PRETEST		POST-TEST		CHANGE				SIGNIF
Measure	Exp	Control	Exp	Control	Exp Change	Exp S.D.	Control change	Control S.D.	Signif
Fluency	7.309	7.500	6.613	6.965	.690	2.503	0.708	3.085	.943
Periph	3.214	3.281	1.863	2.931	1.357	2.127	.500	2.226	.075
Central	4.119	4.218	4.750	4.034	-.642	2.748	.208	2.377	.111
Positive	2.982	3.343	4.068	2.965	-1.096	2.648	.250	1.939	.017*
Negative	1.500	.906	.473	1.000	1.000	2.613	-.041	1.160	.154
Neutral	2.952	3.250	2.045	2.931	.881	1.837	.583	2.552	.730

a) The change scores of the boy of another race for the experimental and control groups, indicated that the only statistically significant change effects were positive attitude ($F=6.082$, $p<0.017$; ANOVA: appendix D).

b) No other changes approached statistical significance although there was a tendency for the peripheral statements to decrease and the central statements to increase, in the experimental group compared to the control.

Table 5. PERCEPTION OF A GIRL OF ANOTHER RACE: Summary of experimental and control groups pre-and post-test; and change means, standard deviations and level of significance.

	PRETEST		POST-TEST		CHANGE				SIG F
Measure	Exp	Control	Exp	Control	Exp Change	Exp S.D.	Control change	Control S.D.	Signif of F
Fluency	6.561	6.866	5.454	7.160	1.073	2.787	0.333	3.744	.285
Periph	2.731	3.133	1.795	3.120	.878	2.099	.381	1.532	.241
Central	3.829	3.766	3.659	4.040	3.659	4.040	.195	2.389	.745
Positive	2.536	2.500	2.636	3.320	-.048	2.376	-.761	2.567	.294
Negative	1.097	.866	.545	.960	.561	1.566	.000	1.788	.199
Neutral	2.878	3.500	2.204	2.880	.585	2.085	1.095	2.278	.407

a) Analyses of variance computed for the change scores for the experimental and control groups indicated that there were no statistically significant change effects for the perception of a girl of another race. ($F=1.165$, $p<0.285$ (Fluency); $F=1.401$, $p=0.241$ (Peripheral); $F=.107$, $p<0.745$ (Change); $F=1.122$, $p<0.294$ (Positive); $F=1.688$, $p<0.199$ (Negative); $F=.699$, $p<0.407$ (Neutral); appendix D).

b) No other changes approached statistical significance although there was a tendency for the peripheral and negative statements to decrease, in the experimental group compared to the control.

In summary, factorial analysis of variance indicated that none of the three main effects, session, race or experimental \ control was statistically significant for change pre- and post-test, other than for neutral and negative attitudes to self.

4.2. SELF PERCEPTION VARIABLES

The following summaries of tables of ANOVAs indicate significant interactions or differences between the means which are relevant to this study.

Table 6: ANOVA of PIERS-HARRIS PRETEST

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	799.032	4	199.758	3.326	.015
SESSION	96.017	2	48.009	.799	.454
RACE	499.005	1	499.005	8.308	.005*
E#C	129.151	1	129.151	2.150	.147

The ANOVA indicates a significant difference for the Piers-Harris pretest for race. From the means table the means for black pupils were higher than those of the white pupils of both experimental and control groups (black = 65.8182 (Exp), 63.2500 (Control); white = 60.7619 (Exp), 58.0455 (Control); appendix E) .

Table 7: ANOVA of SELF DESCRIPTION FLUENCY STATEMENTS: PRETEST

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	350.908	4	87.727	5.421	.001
SESSION	128.847	2	64.423	3.981	.023*
RACE	147.745	1	147.745	9.130	.004*
E#C	16.598	1	16.598	1.026	.315

The significant differences for session and race are reflected in the means table (appendix E). This indicates that the white pupils of both controls and experimentals had higher means than the black pupils and that the first session showed the lowest means on the number of statements in the description of self (black = 7.3810 (Exp), 7.0 (Control); white = 11.3810 (Exp), 9.3182 (Control); 6.4 (Session 1). There were no significant interactions.

Table 8: ANOVA of SELF DESCRIPTION CENTRAL STATEMENTS PRETEST

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	268.083	4	67.021	4.806	.002
SESSION	91.959	2	45.980	3.297	.043*
RACE	129.337	1	129.337	9.275	.003*
E#C	4.717	1	4.717	.338	.563

The significant differences for session and race (significance levels - $p<0.05$; $p<0.01$) are reflected in the means table (appendix E) which indicates that the white pupils of both controls and experimentals had higher means than the black pupils and that the first session reflected the lowest means in the description of self (black = 3.8571 (Exp), 4.4667 (Control); white = 8.0000 (Exp), 6.0455 (Control); 5.0 (Session 1). There are no significant interactions.

Table 9: ANOVA of SELF DESCRIPTION POSITIVE ATTITUDE STATEMENTS: PRETEST

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	99.878	4	24.970	3.360	.015
SESSION	39.542	2	19.771	2.660	.078
RACE	31.815	1	31.815	4.281	.043*
E#C	6.593	1	6.593	.887	.350

The ANOVA indicates a significant difference for positive attitude statements pretest for race (significance level - $p<.05$). From the means table (appendix E) the means for white pupils were higher than those of the black pupils of both experimental and control groups (black = 3.7143 (Exp), 3.7333 (Control); white = 6.0476 (Exp), 4.5455 (Control). There are no significant two- or three-way interactions.

Table 10: ANOVA of SELF DESCRIPTION NEUTRAL ATTITUDE STATEMENTS: PRETEST

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	52.509	4	13.127	2.609	.044
SESSION	14.207	2	7.104	1.412	.251
RACE	20.552	1	20.552	4.084	.048*
E#C	7.632	1	7.632	1.517	.223
2-way Interactions	101.372	5	20.274	4.029	.003
SESSION RACE	97.944	2	48.972	9.733	.000*
SESSION E#C	3.478	2	1.739	.346	.709
RACE E#C	.325	1	.325	.065	.800

The significant differences for race (significance level - $p<0.01$) are reflected in the means table (appendix E) which indicates that the white pupils of both controls and experimentals had higher means than the black pupils of neutral attitude statements in the description of self pretest (black = 3.3810 (Exp), 2.6667 (Control); white = 4.6667 (Exp), 3.9091 (Control). There is a significant two-way interaction between session and race.

4.2.1. BETWEEN- AND WITHIN-SUBJECTS EFFECTS

The following Multivariate Analysis of Variance (MANOVA) indicates the between- and within-subjects effects for the factors Session, Race and Experimental \ Control by Piers-Harris pre- and post-test.

Table 11: MANOVA: Between-subjects effects

Tests of Significance for T1 using UNIQUE sums of squares

Source of Variation	SS	DF	MS	F	Sig of F
WITHIN CELLS	6263.99	59	106.17		
CONSTANT	187818.23	1	187818.23	1769.04	.000
SESSION	577.78	2	288.89	2.72	.074
RACE	1416.75	1	1416.75	13.34	.001*
E#C	230.88	1	230.88	2.17	.146
SESSION BY RACE	447.06	2	223.53	2.11	.131
SESSION BY E#C	603.27	2	301.63	2.84	.066
RACE BY E#C	453.58	1	453.58	4.27	.043*
SESSION BY RACE BY E #C	638.80	1	638.80	6.02	.017*

Table 12: MANOVA: Within-subjects effects

Tests of Significance for T2 using UNIQUE sums of squares

Source of Variation	SS	DF	MS	F	Sig of F
WITHIN CELLS	346.38	59	5.87		
PIERS	31.27	1	31.27	5.33	.025*
SESSION BY PIERS	41.74	2	20.87	3.55	.035*
RACE BY PIERS	.45	1	.45	.08	.782
E#C BY PIERS	.71	1	.71	.12	.729
SESSION BY RACE BY PIERS	5.99	2	2.99	.51	.603
SESSION BY E#C BY PIERS	26.05	2	13.02	2.22	.118
RACE BY E#C BY PIERS	.00	1	.00	.00	.985
SESSION BY RACE BY E#C BY PIERS	.16	1	.16	.03	.871

a) The MANOVA of between-subjects effects indicates that there are significant interactions between the Piers-Harris and race ($p < 0.001$) and significant two way interactions between race and experimental \ control ($p < 0.05$) and three way interactions of session by race by experimental\ control ($p < .05$).
b) According to the MANOVA of within-subjects effects the only statistically significant interaction is session by Piers-Harris ($p < 0.05$).

4.3. PERCEPTION OF OTHERS VARIABLES

The following summarised ANOVA table indicates the significant interactions or differences between the means in the perception of others which are relevant to this study.

Table 13: ANOVA of BOY DESCRIPTION CENTRAL STATEMENTS: PRETEST

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	62.553	4	15.638	2.538	.050
SESSION	9.059	2	4.529	.735	.484
RACE	44.134	1	44.134	7.161	.010*
E#C	2.671	1	2.671	.433	.513

A significant difference for race is indicated by the ANOVA in the description of a boy of another race for central statements pretest. The means table (appendix E) indicates that the means for white pupils are higher than

those of the black pupils (black = 2.9048 (Exp), 4.2667 (Control); white = 5.3333 (Exp), 4.1765 (Control). There are no significant two- or three-way interactions.

No further significant variances or interactions were noted for the perception of others, with the exception of some minor trends irrelevant to this investigation.

4.4. CORRELATIONS BETWEEN SELF-CONCEPT AND OTHER PERCEPTION

The reader is referred to the Pearson product-moment correlation coefficient matrix (appendix F) for analyses other than those quoted below.

a) There were no positive significant correlations between the Piers-Harris and the self description statements. However, Negative attitude towards the self and the Piers-Harris indicated a significant negative correlation of -.3446 ($p = .001$).

b) Positive significant correlation coefficients were not observed between the Piers-Harris and the statements in the descriptions of a boy or a girl (appendix F).

c) Positive and significant correlations at the $p < .000$ level (appendix F), were computed between the self and boy descriptions; and boy and girl descriptions, for fluency, peripheral and central statements. The correlations between self and the girl descriptions were positive for the central statements only (.6440, significant at $p < .000$ level).

d) The correlation between the SEI and the Piers-Harris was .6356 ($p = .018$) for 11 subjects.

e) Positive correlations were computed for self descriptions between fluency and central statements (.8848, p = .000) and fluency and positive attitude (.7561, p = .000); and between central statements and positive attitude (.8740, p = .000).

This concludes the report of the results of the statistical analysis of the data. These will be discussed and recommendations suggested in the final chapter.

CHAPTER 5.
DISCUSSION AND CONCLUSIONS

This study has focused on the effects on stereotyping of participation in the Sawubona Dialogue Programme, by measuring changes in the perception of others and self. Only the analysis of the data relevant to this and to the research hypotheses will be discussed in detail, although there will be a brief discussion of other relevant findings. The results will be examined in relation to the theoretical framework in order to clarify the factors and conditions which have implications for change. The limitations of this study will be considered and recommendations for future research in this area will be suggested. Finally, conclusions will be drawn.

5.1. RESULTS IN TERMS OF THE RESEARCH HYPOTHESES

The major hypothesised effects between the Sawubona Dialogue Programme and person perception were not observed. These and other results in relation to the research hypotheses set out in Chapter 3 are discussed below:

as a result of participation in the Sawubona Dialogue Programme:

HYPOTHESIS 3.3.1.: experimental groups would tend to show more individuated impression formation, compared with the control groups i.e. experimental groups would have more central than peripheral statements in their descriptions post-test than control groups.

a) The analysis of between-subjects effects indicated that no relation of significance exists between the main independent variable and the dependant variables. However, the change means for peripheral statements in

the descriptions of both a boy and a girl of another race, although not statistically significant ($F=3.289$, $p<0.075$; and $F=1.401$, $p<0.241$; ANOVAs, appendix D), indicated as predicted a tendency to decrease in the experimental groups compared to the controls.

b) There was a tendency, again not statistically significant, for the central statements to increase in the descriptions of a boy in the experimental groups ($F=2.615$, $p<0.111$; ANOVA, appendix D), but this was not observed in the description of a girl ($F=.107$, $p<0.745$; ANOVAs, appendix D).

It is assumed that this difference reflects the fact that contact was with boys only during the Dialogue Programme and supports the evidence of increased central and fewer peripheral statements in descriptions when the stimulus person is more familiar to the subjects. Other results from the description of a girl compared to those of the description of a boy provide further evidence for this assumption. These findings support the research of Epstein and Feist (1988) who concluded that there is a positive relation between self and other evaluation (Epstein, 1973, 1991; Kelly, 1955) which is moderated by the extent to which the perceiver identifies with the others. Their study demonstrated that boys identified more strongly with other boys and rated them more favourably than girls.

This observed trend supports the findings of Basson (1974), Livesley and Bromley (1973) and Prentice (1990): that a greater number of central, or psychological statements will be produced and peripheral statements (those describing external qualities) will decrease, as a result of liking (or being more familiar with) rather than disliking stimulus individuals. It also suggests limited support for more individuated impression

formation having taken place as a result of participation in the Sawubona programme.

HYPOTHESIS 3.3.2.: experimental groups would show significant increases on the post-test measures of self-concept compared with the control groups.

a) The difference between the Piers-Harris means change scores for the experimental group compared to the controls, is not statistically significant ($F=3.620$, $P<0.062$; ANOVA, appendix D). The change means were nearing significance and reflected an increase in self-concept scores. However, the experimental group indicated less change than the controls (Table 5, p.52).

The most obvious explanation of the failure of this measure to reveal significant differences is that the intervention was not sufficiently powerful for these effects to be observed, or that the intervention was too brief and thus had very little impact (Devine, 1989; Harter, 1990; Piers, 1984).

The reason for the upward trend in the scores on the Piers-Harris for all participants is not clear. As discussed previously (Section 2.3.3.), the literature claims that self conceptions are extremely stable and resistant to change (Andersen, 1987); conversely there is much research evidence that the self-concept is malleable and easily changed (Markus and Wurf, 1987; Piers, 1984; Tesser and Campbell, 1983).

Authors such as Markus and Kunda (1986) posit that there is both malleability and stability in the self-concept. Stability is usually observed for general descriptions of the self and malleability occurs in the working self-concept because of its social nature (discussed in section 2.3.3). These authors suggest that this

malleability will be fairly subtle and many self-concept measures will not reflect this change. This will be so especially if the measures assume that the self-concept is a static structure and are not adequate for revealing how the individual adjusts the working self-concept in response to the social situation. Although Piers (1984) claims to accept the dynamic, multifaceted nature of the self-concept, the Piers-Harris instrument has been criticised for measuring a general self-concept and a "relatively stable" (Piers, 1984) set of self-attitudes (Harter, 1986; Marsh, 1986; Marsh and Shavelson, 1985; Wylie, 1989) (See section 3.3.3).

In spite of being a fairly gross measure of apparently subtle change, the Piers-Harris has reflected what would seem to be responses of the working self-concepts of all the participants to the social situation (Fiske and Von Hendy, 1992; Markus and Kunda, 1986). However, since the Piers-Harris measures only a global self-concept and not the working self-concept, only very tentative suggestions as to the factors in operation can be made. A possible explanation for the increase in self-concept scores on the Piers-Harris for all subjects, is that this occurred as the result of the interaction of a number of factors in the social situation, such as change in the geopolitical balance, optimism in the country generally and which subjects were responding to and so contributing to their more favourable views of themselves (Duckitt and Foster, 1991; Thiele, 1991). As the scores of the experimental group reflected less of an increase than those of the controls, the suggestion that the intervention was not powerful enough to influence self-concept scores is supported. However, a tentative explanation for the smaller increases in the scores of the experimental group could be, as some research has indicated (Markus, 1990), that participants had become more realistic in their assessments of themselves or that

the public selves were responding to evaluations from important others (e.g.Baumeister and Tice, 1986; Breckler and Greenwald, 1985; Leippe, 1991), as the result of the intervention.

A related issue is concerned with the significant difference for race on the Piers-Harris measures and significant two-way interactions between race and experimental\control ($p<0.05$) indicated by ANOVA (appendix D), means table (appendix E) and MANOVA (Table 11, p.55); where the means for black pupils for all subjects were higher than for whites. This finding supports research evidence which suggests that self-concept scores are generally higher for blacks compared with whites (e.g. Burns, 1982; Edwards, 1984; Howcroft, 1990; Wylie, 1979).

Explanations for this difference reviewed by Howcroft (1990) are that this is one of the possible effects of the Black Consciousness Movement, that blacks may blame society rather than themselves for lack of personal success, and that there is the possibility of "inauthentic" self-esteem among black students which is maintained through defence mechanisms in order to maintain positive self feelings. Although this study has not focused on cross-cultural issues, some of the research in that field is relevant to this discussion. According to this perspective, the views of self, of others and the interdependence of the two differ among cultures, so that some stress an independent view of the self (e.g. most Western cultures), whilst others stress an interdependent view, such as the Chinese, Japanese and Africans (Markus and Kitayama, 1991). Triandis (1989) refers to collectivistic cultures and the private, public and collective self (Breckler and Greenwald, 1985; Trafimow, Triandis and Goto, 1991; Triandis, Bontempo, et al., 1990). This suggests that black subjects possibly

assessed themselves in relation to the collective self and so reflect a higher self-concept score than the white subjects who have an independent view of the self.

c) When comparing the data on the free descriptions of self, the ANOVAs (appendix D) indicate that the only change effects which were statistically significant at the $p<0.05$ level, were negative and neutral attitude to self statements. However, although the neutral attitudes to self statements decreased, there was an increase in the negative attitude statements contrary to the predicted decrease. Again, these results suggest that as a result of the intervention, the experimental group was possibly responding in a more realistic way in their perception of themselves and therefore using both more negative (an increase of 5%) and more positive statements (increased by 9%) rather than neutral statements (decreased by 12%), (Burns, 1982).

d) Both the means for peripheral and central statements, although not statistically significant, indicated a tendency to decrease on the former ($F=3.421$, $p<0.069$) and showed an increase on the latter ($F=1.867$, $p<0.177$), as predicted. Positive statements showed a similar trend, as predicted ($F=.747$, $p<0.391$; appendix D).

In summary, the hypothesis is not supported. Although there is an increase on the Piers-Harris measures, this is not statistically significant and the increase was true for all subjects, not only the experimental group as predicted. Furthermore, the no-treatment control group reflected a greater positive change than the experimentals. The free self description change scores are also not statistically significant, but the data show some trends in support of previous findings by Basson (1974), Livesley and Bromley (1973) and Prentice (1990).

The reason posited for the failure of the results to support the hypothesis is that the Sawubona Dialogue Programme was not sufficiently powerful, or was too brief to reveal significant differences or effects and that it was also not directed specifically at change in self-concept. (See section 5.2. for further discussion).

HYPOTHESIS 3.3.3.: experimental groups would show increases in fluency compared to control groups, i.e. descriptions will contain more statements, as a result of participation in the programme.

The hypothesised effect was not supported. There is no evidence of increases in fluency in the statements in the self or other descriptions of any of the subjects, and no tendencies towards significance as the result of the intervention (Tables 3,4,5; appendix D).

This result is contrary to the findings of Livesley and Bromley (1973) and Basson (1974) who demonstrated that there was an increase of interaction and therefore more information with liked individuals or more familiar individuals (Prentice, 1990; Sande, Goethals and Radloff, 1988). A possible interpretation for this lack of support for previous research, is again that the intervention failed to have sufficient impact to show any changes.

Another relevant factor might have been that a time limit of 4 minutes per description, as suggested by Livesley and Bromley (1973) and McGuire and McGuire (1989) was imposed, so that the number of statements was restricted and therefore no increases for any subjects occurred. This interpretation is in some measure supported by the finding that all white subjects had significantly higher means on fluency and central statements than the black subjects, suggesting that the black pupils would have had some difficulties with expressing themselves in English

and so might have written the minimum number of statements on both pre- and post-test (appendix E).

HYPOTHESIS 3.3.4.: experimental groups would tend to use more positive statements than negative and neutral statements in their descriptions post-test, compared to control groups.

a) Positive attitude towards a boy of another race was the only change effect which reached a level of statistical significance ($F=6.082$, $p<0.017$; appendix D) for the experimental and control groups. This is an expected result and suggests that the intervention was effective in changing the attitude of the experimental groups, so that there was a more favourable response after contact with boys of another race.

b) There were no statistically significant change effects for the perception of a girl of another race on these variables and only a slight tendency for a decrease in the means of negative statements (Table 5, p.52: $F=1.688$, $p<0.199$; ANOVA appendix D). The difference between the boy and girl descriptions is assumed to be for the same reason as previously discussed (see hypothesis 3.3.1.), and that the reverse effects would occur for the Programmes in which girls only were the participants.

c) Self description positive statement means (Table 3, p.50) showed a tendency to increase, as predicted ($F=.747$, $p<0.391$; appendix D). However, although means of the neutral attitudes to self statements decreased, there was an increase on the means in the negative attitude statements contrary to the predicted decrease (reasons for these results have been posited above, see hypothesis 3.3.2.). There was a significant difference for the positive and neutral statement means of white and black subjects on the pretest, with white subjects

scoring significantly higher (Tables, 9,10, pp.54,55). The reason for this discrepancy compared to the reverse finding of higher self-concept scores for blacks is not clear, although it is supported by the lack of correlation between positive attitudes and the Piers-Harris (appendix F).

Although these results have failed to support the hypothesis and they are contradictory, there is nevertheless a tendency for more positive statements to be used by the experimental group (experimental mean = 4.0932; control mean = 3.5595) than negative (experimental mean = .6313; control mean = .8826) and neutral (experimental mean = 2.3250; control mean = 3.1036). This suggests that, generally, experimental groups were tending to hold more favourable attitudes in their perception of self and others as a result of the intervention.

HYPOTHESIS 3.3.5.: experimental groups would use fewer negative statements in their descriptions than the control groups.

a) Negative attitude to self is the only change effect which reached a level of statistical significance ($F=6.268$, $p<0.015$; appendix D) in the experimental and control group descriptions. However, the change was the opposite of the predicted direction. The increase in the number of statements reflecting a negative attitude to the self could be consistent with the smaller increase in the self-concept scores for the experimental group. Similarly, a possible explanation is that, as a result of the intervention, the attitudes of the experimental group reflected a more realistic or negative view of themselves and therefore the number of negative statements increased. However, this will need to be verified with further refined investigation.

Research which supports the above explanation is discussed by Markus (1990) in a review which includes the potential positive effects of negative thoughts. She writes that many researchers are currently concerned with investigating positive and negative states of mind. The findings suggest that negative self-schemas assist individuals to cope with the negative experiences in their lives so that the self-concept is not entirely swamped; a balance between the positive and negative in self-conceptions is the most beneficial for psychological adaptation (Cantor and Kihlstrom, 1989; Oyserman and Markus, 1989). From this perspective it would seem that the increase in negative self attitude statements possibly reflects an attempt to maintain the self-concept. This view is supported by research evidence that white students tend to view themselves in the poorest light while blacks tend to have a more favourable perception of their own group (Edwards, 1984).

b) Although change means of the other negative attitude scores (Tables 4,5, pp.51,52) were not statistically significant there was generally a reduction of the means, thus giving some limited support to the hypothesis that fewer negative statements would be used by the experimental groups as a result of the programme.

HYPOTHESIS 3.3.6.: there would be a positive correlation between self-concept and perception of others.

a) The predicted positive significant correlation coefficients were not observed between the Piers-Harris and the statements in the descriptions of self, a boy or a girl (appendix F). This suggests that the dependent variables were not measuring the same construct, which will be elaborated on below. Negative attitude towards the self and the Piers-Harris indicated a significant

negative correlation of -.3446 (p = .001), which is consistent with expectations.

b) The correlations between the self and boy descriptions; and boy and girl descriptions for fluency, peripheral and central statements, were positive and significant at the p<.000 level (appendix F). The correlations between self and the girl descriptions were positive for the central statements only (.6440, significant at p<.000 level).

c) The correlation between the SEI and the Piers-Harris was .6356 (p = .018) for 11 subjects, which is a small sample, but nevertheless supports the findings of other research (e.g. Burns, 1979; Piers, 1984; Wylie, 1989).

The hypothesis of a positive correlation between self-concept as measured by the Piers-Harris, and self or other perception as measured by the free descriptions, is not supported in this study. However, self-concept, showed a positive relationship as reflected by the responses on the self descriptions and perception of others by the responses in the descriptions of a boy and a girl. A possible reason for this discrepancy is that the instruments are measuring different constructs i.e. the global self-concept of the Piers-Harris compared to a more multidimensional self-concept of the free descriptions.

To elaborate on this, if the Piers-Harris and the free descriptions are measuring different constructs, e.g. stable self-concept and the working self-concept, then there should not be a correlation between the two measures. However, it should be possible to demonstrate a relationship between the dependant variables for self and other on the free descriptions. As predicted there was no correlation between the Piers-Harris and the free

descriptions. The correlations between the self and boy descriptions; and boy and girl descriptions for fluency, peripheral and central statements, were positive and significant at the $p<.000$ level (appendix F). The correlations between self and the girl were positive for the central statements only (.6440, significant at $p<.000$ level). In sum, a relationship can be observed between self-concept and perception of others on the free descriptions of self and others but not on the Piers-Harris. An explanation for this is that it is likely that they are measuring different aspects of the self-concept.

5.1.1.SUMMARY OF RESULTS

To summarise the discussion of the results of this study in relation to the main independent variable: there are no statistically significant results that support the hypotheses. There is little difference in the between-subjects variance, so the assumption must be that the independent variable, Sawubona Dialogue Programme, has not operated or that the effects are too weak to be statistically noticed. However, there are some trends which can be observed and support previous research findings of Basson (1974), Livesley and Bromley (1973) and Prentice (1990); notably that central and positive statements tended to increase, while negative, neutral and peripheral statements tended to decrease in the experimental groups when describing self or a boy rather than a girl. These tendencies suggest that stereotyping had decreased. There was some evidence of a relationship between self-concept and the perception of others (on some dependent variables) in this study. Self-concept scores increased for all subjects, but showed less increase in the experimental groups, suggesting a more realistic assessment of self as a result. These tentative trends suggest that less category-based impression formation had taken place and more positive attitudes

were evident, as the result of participation in the Sawubona Dialogue Programme.

5.2. RESULTS IN TERMS OF THE THEORETICAL FRAMEWORK

The following discussion will focus on the implications of the results in terms of the theoretical framework and examine reasons for the failure of the Sawubona Dialogue Programme to show statistically significant results, and consider causes for the trends which have been identified.

In their review of research on "change" programmes Amir and Ben-Ari (1989), suggest that the amount of work done is impressive but are critical of the scientific quality and sophistication of these programmes. Few have clearly defined their objectives or theoretical basis and tend to use a "cookbook" approach. Sawubona staff consulted various sources in making decisions about the format for their Programme, but there was little cohesion in the theories they adopted and their concern was far more with ideological than theoretical issues. Another factor related to this, was that neither of the staff members reponsible for the Programme was formally trained in any sphere that was relevant to this kind of intervention e.g. a large proportion of the "Dialogue" was didactic instructing by the staff, rather than discussion. These could be seen as important factors in the Programme's lack of power and impact. As an evaluation of the Dialogue Programme has been completed (Ferguson, 1992) and is not the focus of the present study, this will not be elaborated. However, one other serious drawback of the Programme which needs to be mentioned is the brevity of the intervention and lack of frequency of contact over time. Most researchers suggest that time pressures or constraints are factors that could seriously limit the effects of an intervention (Brewer, 1988; Devine, 1989;

Fiske and Neuberg, 1989; Groenewald, 1990; Harter, 1990; Mynhardt and du Toit, 1991; Piers, 1984). Even though some research (e.g. Desforges, Lord, Ramsey, et al., 1991) claims that other factors rather than time are of importance, a programme which is of 2 days' duration, contrasted with for example, Outward Bound which extended over 26 days, will probably not have the expected impact (Marsh, Richards and Barnes, 1986).

5.2.1. IMPRESSION FORMATION

The theory of impression formation which informs this study (discussed in Chapter 2), posits that individuals can form impressions of others by relying more on the social stereotype of their group and making adjustments to that stereotype, or by relying more on individuating information. The final impression is somewhere along a continuum ranging from category-based to primarily individuating processes (Fiske and Neuberg, 1990).

According to the continuum model (Fiske and Neuberg, 1990), category-based processes will have priority over more individuating processes in impression formation and rapid initial categorisation will take place based usually on obvious physical cues. Race, a conspicuous labelling feature, is a category which is probably chronically accessible, or permanently primed (Brewer, 1987; Devine, 1989; Fiske, 1990). Therefore, it is assumed that the automatically accessible social stereotypes for race would have been activated for the black and white subjects in this study and more individuated information processing would not have occurred initially.

Attention is an important and necessary aspect of impression formation if further attribute-based processing is to take place (Fiske and Neuberg, 1990). As

the majority of the subjects of the Dialogue Programme were volunteers, it can be assumed that the targets were relevant and interesting to the perceivers and that therefore further attention would be given to those targets thus allowing for possibly more individuated impression formation to take place.

The continuum model proposes that more individuated information processing is likely to occur if the attributes of the targets are perceived as inconsistent with the category ascribed to the target (Fiske and Neuberg, 1989; 1990). The Dialogue Programme, provided some circumstances in which the black participants particularly could possibly disconfirm the negative stereotypes held of them. For example, the participants were taken to the townships and involved in community projects where blacks would have felt more at ease and informal activities such as soccer were encouraged in which the black pupils could achieve. Related to this issue is that both cooperation and competition have been found to encourage more accurate impression formation in some circumstances (e.g. Desforges, Lord, Ramsey, et al., 1991; Gaertner, Mann, Dovidio, et al., 1990; Ruscher and Fiske, 1990). Both were promoted during the Programme. These could be some of the reasons for the less category-based information processing that was suggested by the results.

The model proposes that the perceiver's motivation, and particularly the perceived interdependence structure is an important consideration in impression formation, whether category- or attribute-based. Motivation for these subjects was possibly by a third party, which was likely to have been the Sawubona staff, school authorities who were closely involved with the pupils and peers who knew that these pupils were representing their schools. It can also be assumed that they were motivated

by internalised values and were committed to racial integration, otherwise they would not have volunteered for the Programme. The briefing sessions would also have primed these personal values. Subjects therefore would have been self-motivating to interact with others so that expectancies were not confirmed and they would be more accurate in their impression formation (Katz and Hass, 1988). Whether they were motivated by the targets is not known but unlikely initially. Although the focus of this study was not on motivation, an investigation of subjects' goals as part of the research might have been fruitful.

5.2.2. IMPLICATIONS FOR CHANGE AND CONTROL OF THE EFFECTS OF CATEGORISATION AND STEREOTYPING

Most current research accepts that stereotypes are difficult to change (Brewer, 1988; Devine, 1989; Fiske and Neuberg, 1989; Hewstone, 1989). Many "change programmes" and intervention strategies (relevant research was discussed in Chapter 2) have been proposed and used with mostly minimal success, as mentioned earlier (Amir and Ben-Ari, 1989), so that in considering the design of intervention strategies a firm theoretical base is of great importance. Fiske and Neuberg's (1990) theory which specifies how category-based and individuating processes operate and the conditions under which each is likely to occur, is one framework that can inform such interventions (others which are similar include, Brewer, 1988; Devine, 1989; Hewstone, 1989).

Fiske and Neuberg (1989), in contrast to those researchers who attempt to alter the stereotype by changing its content, claim that it is easier to change the temporary goals of perceivers rather than their stereotypes and prejudice. Targets must be perceived as category inconsistent, but more importantly, perceivers

must be motivated to attend to this inconsistent information and interpret it in an unbiased manner. The implications of their theory for the design of intervention strategies are that interventions must provide a perceiver with the goal of impression accuracy and a context in which attainment of this goal is possible. This includes lack of time pressure (Brewer, 1988; Devine, 1989).

If, as the trends from the results suggest, the experimental groups were moving towards more individuated categorisation, it is relevant to question where their responses fell on the continuum and raises the issue of generalisation effects. The quality of these responses, presumed to be recategorisation, was not measured and the follow-up measures, which could have indicated whether intervention effects had remained stable, were not able to be carried out, with the exception of 11 subjects from one white school, as discussed in the introduction. The size of this sample is not large enough for any conclusions to be drawn, but an inspection of the data suggests inconsistent results, with some means supporting the speculation that generalisation had not occured e.g. central statements for self description, for that experimental group ranging from 8.000 (pretest); to 8.9000 (post-test); to 4.4300 (follow-up). These limitations and shortcomings will be discussed further below (section 5.3.2.1).

5.2.2.1. GENERALISATION

It is possible, as increasing research evidence has suggested, that the subjects were using subtypes which constitute the basic-level categories that perceivers habitually use (Fiske, 1993). One implication of subtyping is that individuals who do not confirm a global stereotype can be "fenced off" (Allport, 1954) leaving

the overall stereotype intact (Rothbart and Lewis, 1988). This has implications for interventions such as Sawubona's Dialogue Programme, in that it is unlikely that there will be a generalisation effect. Hewstone's (1989) review of this research concludes that typicality of the out-group member is crucial to overcome subtyping and for generalisation to occur. It is likely that these subjects would not have been regarded as typical, especially over such a short contact period.

Desforges, Lord, Ramsey, et al.(1991) claim that, even when all conditions for the contact hypothesis are met, there is little research evidence that contact will normally elicit more positive attitudes towards the group as a whole. From their research they concluded that structured contact in a cooperative interaction resulted in more positive effects, which generalised to more positive attitudes towards the group. They proposed that generalisation is more likely to occur after an adjustment stage if the specific person is liked more than expected but is still associated with his larger social group. Adjustment presumably maintains a tighter cognitive association between the specific member and his or her social group than does individuation (Gaertner, Mann, Dovidio, Murrell and Pomare, 1990).

Desforges, Lord, Ramsey, et al.(1991) suggest that quality rather than quantity is important to achieve generalisation. Studies usually involve contact with more than one member of the negatively stereotyped group and it is possible that even 1 person in 10 who completely confirms the stereotype is sufficient to leave it intact. The addition of a script may be a necessary condition to be added to the contact hypothesis, as this can ensure structured opportunities for subjects to learn about the objects of their negative stereotypes and so overcome these stereotypes. Although many of the activities

organised by Sawubona were structured, there was no formal script for cooperation. It is also not unlikely that at least one of the members of the other group confirmed the stereotype so that less attribute-based impression formation took place. This also supports the assumption that subjects were likely to use subtyping and so retain the overall stereotypes.

Although the Sawubona Dialogue Programme failed to have a significant impact, the analysis of the data indicated trends towards less stereotypical or category-based impression formation. This suggests that the Programme was possibly providing some of the necessary circumstances for change to be effective, but was not powerful enough. Whether these trends towards more individuated impression formation remained stable and were generalised or not is uncertain but not probable.

5.2.3. THE ROLE OF THE SELF-CONCEPT IN PERSON PERCEPTION

This study examines the view that there should be a relationship between how an individual perceives himself and how he forms impressions of others and that the entire person perception process can be influenced by the self-concept. There are some indications in this research of a relationship between self perception and the perception of others on certain dependent variables. The lack of strong evidence for this is assumed to be related to construct validity in the measurement instruments, in that, since there were no positive correlations between the Piers-Harris and the self descriptions, they were not measuring the same construct.

However, the positive correlations for self and others on the free description measures tentatively support the literature that claims that the way we perceive ourselves will influence the way we perceive others (e.g. Baldwin,

1992; Markus and Wurf, 1987; Tice, 1992) and that self-concept is central to the organisation of information about other people (Basson, 1974; Prentice, 1990).

5.3. LIMITATIONS OF THIS STUDY

Factors that need to be considered when interpreting the results of this study are mainly related to research methodology and particularly measurement and the instruments used. The failure to produce significant effects of the main independent variable is discussed in terms of these limitations.

5.3.1. THE SAMPLE

Kerlinger (1986) writes "Because such control is not always possible in much psychological, sociological, and educational research, should we then give up research entirely? By no means" (p.299). He proposes that a compromise research design is often necessary and acceptable in such circumstances. A compromise has been necessary in this study, in that the sample was fixed by the schools in consultation with the Sawubona staff and the researcher had no control over selection of experimental or control groups. These should ideally have been randomised in order to prevent systematic biasing by nuisance variables (Keppel and Saufley, 1980). However, an attempt was made to ensure that the control groups were drawn from similar populations i.e. the same classes as the experimental groups (Kerlinger, 1986). Although the subjects were drawn from six different schools representing a cross section of social and economic strata there was no strict control over these variables either. Subjects possibly represented specific populations and did not include for example, rural schools, nor students from other races or language groups. The pupils, especially the experimental group,

were mostly volunteers so that self selection was operating and could mean that the sample was biased and represented only those who were already interested in integration with members of other race groups. The sample size should ideally have been larger, since, when the number of subjects is small, the probable error is typically small relative to the size of the likely effect and could be a reason for the failure to show change (Marsh, Richards and Barnes, 1986). For this reason, ideally the significance levels should be $p < .01$ instead of $p < .05$. These limitations need to be kept in mind when interpreting the results of this study.

5.3.2. MEASUREMENT

5.3.2.1. FOLLOW-UP MEASURES

As mentioned previously, the imposed cancellation of the majority of the follow-up measures is a limitation of this research, in that stability of results over time could not be verified and assumptions about generalisation could not be confirmed. Follow-up was intended for completion at the end of the year (1991). However, the black schools closed earlier than anticipated in order to avoid politically motivated unrest so that those subjects were not available, and most of the white schools were involved with year-end examinations so that they too were unavailable. Only 11 subjects finally completed the follow-up assessments, which is too small a sample from which to draw any significant conclusions. These data therefore have not been taken into account in the statistical analysis although some very tentative trends are considered in previous discussion (section 5.2.2).

5.3.2.2. RACIAL ATTITUDES INSTRUMENT

A more serious shortcoming is the omission of some form of more direct assessment of racial attitudes. Various alternatives were investigated when measures were being selected, and the Subtle Racism Scale (Duckitt, 1990), was considered to be the most feasible (see 3.2.). Unfortunately it was not published until late in the year when the students were no longer available and so was not used. Duckitt (1991; 1993) claims that obvious and transparent measures of racism no longer adequately reflect racial prejudice. He therefore developed the Subtle Racism Scale which is more indirect in its assessment of anti-black racial prejudice, with high validity and reliability compared to other traditional prejudice scales (Duckitt, 1993). The advantage of the additional information from a scale of prejudiced attitudes needs also to be weighed in relation to the disadvantages. The latter are that it is assessing anti-black racial prejudice whereas the focus of this research is on stereotypes in impression formation of both black and white subjects. Although the scale purports to be a subtle measure of racial prejudice, this is only relative to other similar measures and is likely still to be contaminated by response set.

Considering the importance of the non-reactive approach, particularly in this type of assessment, it is recommended that other possibilities for future research should also be considered e.g. Wrightsman's Philosophy of Human Nature Scale, modified for use in South Africa (cited in Edwards, 1984), which can be used to measure the perception of other race groups "in the context of normal social interaction" (Edwards, 1984).

5.3.2.3. SELF PERCEPTION MEASURES

Another limitation in this investigation is related to the issue of construct validity of the Piers-Harris and the Free Descriptions as measures of self-concept. In retrospect, the use of the Piers-Harris global self-concept score in this study (see Chapter 5, hypothesis 3.3.2.), is a limitation, in that it ignores the multifaceted nature of the self-concept and is not fine grained enough to measure the working self-concept. Although cluster scales could have been calculated to possibly provide additional information about specific dimensions, Wylie (1989) in her review reports that there is item overlap between clusters; that the credibility of the factors has yet to be established; that the Piers-Harris is more unidimensional than multidimensional; and that discriminant validity is doubtful. The implications are that computing the cluster scales would not have provided additional worthwhile information for the purposes of this study.

Marsh, Richards and Barnes (1986) suggest that intervention research rarely demonstrates systematic changes in self-concept if the multidimensional nature of the self-concept is ignored. By using the Self-Description Questionnaire III, which claims to measure multiple dimensions of the self-concept, these authors were able to demonstrate that significant changes had taken place as the result of an intervention. This scale or others e.g. those being developed by Markus and Nurius assessing possible selves and considering motivation in relation to the self-concept (cited in Wylie, 1989) and which focus on the multidimensional approach, could be considered as an alternative for further research, rather than the Piers-Harris or the SEI (Harter, 1986).

Construct validity is also an unresolved issue which needs further investigation with regard to the free description measures (Wylie, 1989; 1974). Wylie (1989) warns that although it appears that this kind of approach is intuitively one that will produce valuable information about self views, "it is more complex than it seems", and one needs to interpret results cautiously because of "the particular threats to construct validity that characterise this approach" (p.5). As yet there has not been sufficient information available to evaluate the coding systems psychometrically e.g. Livesley and Bromley's (cited in Wylie, Ibid.).

Other limitations are concerned with the theory which informs this study, in that a specific aspect of self and other perception in relation to stereotyping was focused on and investigated. This inevitably precluded other perspectives and issues which could be argued to be more relevant. This is however, a moot point and the advantages of this theoretical framework have already been mentioned, for example, in terms of practical intervention strategies.

A related criticism of this study is that the complexity of the issues in person perception seem not to have been emphasised. It is recognised that simplistic solutions to complex problems would be naïve.

These are the most salient limitations of this investigation which should alert the reader to a cautious interpretation of the results. Nevertheless, in spite of these reservations the results show trends which support other research (e.g. Basson, 1974; Livesley and Bromley, 1973) so that they can be regarded as valid for this sample.

5.4. RECOMMENDATIONS FOR FUTURE RESEARCH

Recommendations with regard to the selection of measuring instruments for further research have been discussed in the preceding section concerned with limitations of this research (see 5.3).

Other recommendations concerning future directions for research in this field are related to Fiske and Neuberg's (1989; 1990) theory. These authors propose that more important than concentrating on changing the contents of stereotypes is motivating the perceiver to attend to inconsistent target information and interpreting it in an unbiased manner, using a goal of impression accuracy. Research which focuses on the factors involved in the process of motivation as it mediates goal-directed attention and interpretation in impression formation could be productive in terms of suggesting further refinements for intervention strategies in controlling negative stereotyping.

Other areas for future research are suggested by recent literature which includes social cognition as well as object relations and interpersonal approaches. This perspective focuses on the interrelation of self, personality and the interpersonal world, so that the emphasis is on cognition about relationships instead of the self or the other in isolation (e.g. Baldwin, 1992; Ogilvie and Ashmore, 1991; Safran, Segal, Hill and Whiffen, 1990; Westen, 1991). This approach, because of its comprehensiveness, will be able to consider for example the relationship between self-concept and perception of others and elements of the unconscious self-concept which have been largely ignored by self-concept research in the past. Baldwin (1992) has suggested a number of possible but specific research directions.

5.5. CONCLUSIONS

The focus of this study has been an investigation into the effects of participation in the Sawubona Dialogue Programme on the perception of others, and the self, in order to assess whether less category-based impression formation had taken place.

The statistical analysis of the results of this investigation demonstrate that the hypotheses were not supported and that the Sawubona Dialogue Programme had not been effective or that the effects were too weak to be statistically noticed. However, tentative trends which were observed supported previous research findings of Livesley and Bromley (1973), and Prentice (1990), and suggested that less category-based impression formation had taken place and more positive attitudes were evident, as the result of the intervention. There was some evidence in this study of a relationship between self-concept and the perception of others (on some dependent variables). Self-concept scores increased for all subjects, but showed less increase in the experimental groups, suggesting a more realistic assessment of self as a result.

The theoretical perspective focused on stereotype research in impression formation aiming for a fine grained examination of change. Implications for the design of intervention strategies informed by this theory, have been discussed and recommendations for future directions of research considered.

Finally, this study supports research that rejects the pessimistic view that people will inevitably stereotype others because they have no other options. Motivation and attention are the important keys in more individuated processing, and intervention strategies can successfully

inhibit further stereotyping and prejudice even if initial categorisation is inevitable. In the South African context the implications for this are considerable and the Sawubona Dialogue Programme, although only partially successful in attempting to reduce stereotyping, has moved in a positive direction towards racial integration.

6. REFERENCES

Ajzen,I.(1989) Attitude structure and behavior. In Pratkanis,A.R., Breckler,S.J.& Greenwald, A.G.(Eds.). Attitude structure and function. Hillsdale, New Jersey: Lawrence Erlbaum.

Allport,G.W.(1954). The nature of prejudice. Reading MA: Addison-Wesley.

Allport,G.W.(1968). Is the concept of self necessary? In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Amir,Y.,& Ben-Ari,R.(1989). Enhancing intergroup relations in Israel: A differential approach. In Bar-Tal,D., Graumann,C.F., Kruglanski,A.W.,& Stroebe,W.(Eds.) Stereotyping and prejudice: Changing conceptions. New York: Springer-Verlag.

Andersen,S.M.(1987). The role of cultural assumptions in self-concept development. In Honess,T.& Yardley,K.(Eds.) Self and identity: Psychosocial perspectives. London: John Wiley.

Andersen,S.M.,& Williams,M.(1985). Cognitive/affective reactions in the improvement of self-esteem: When thoughts and feelings make a difference. Journal of personality and social psychology,49, (4), 1086-1097.

Andersen,S.M.,Klatzky,R.L.,& Murray,J.(1990). Traits and social stereotypes: Efficiency differences in social information processing. Journal of personality and social psychology, 59,(2), 192-201.

Anderson,J.R.(1982). Acquisition of cognitive skill. Psychological review, 89, 369-406.

Anderson,J.R.(1978). Arguments concerning representations for mental imagery. Psychological review, 85, 249-277.

Anderson,N.H.(1978). Cognitive algebra: Integration theory applied to social attribution. In Berkowitz, L.(Ed.) Cognitive theories in social psychology. New York: Academic press.

Anderson,N.H.(1988). A functional approach to person cognition. In Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 1, A dual process model of impression formation. Hillsdale: Lawrence Erlbaum.

Appelgryn.E.M.& Nieuwoudt,J.M.(1988). Relative deprivation and the ethnic attitudes of blacks and Afrikaans-speaking whites in South Africa. Journal of social psychology,128.(3),311-324.

Aronson,E.(1978). The theory of cognitive dissonance: A current perspective. In Berkowitz, L.(Ed.) Cognitive theories in social psychology. New York: Academic press.

Aronson,E.,Brewer,M.,& Carlsmith,J.M.(1985). Experimentation in social psychology. In Lindzey,G.,& Aronson,E.(Eds.), Handbook of social psychology, Third Edition, Vol 1. (pp.441-486). New York: Random House.

Baldwin,J.M.(1968). The self-conscious person. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Baldwin,M.W.(1992). Relational Schemas and the processing of social information. Psychological bulletin, 112,(3), 461-484.

Banaji,R.B.,Hardin,C.,& Rothman,A.J.(1993). Implicit stereotyping in person judgment. Journal of personality and social psychology,65 (2),272-281.

Bandura,A.,& Walters,R.H.(1968). The development of self-control. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Bar-Tal,D.,& Kruglanski,A.W.(1988).The social psychology of knowledge. Cambridge: Cambridge University Press.

Bargh,J.A.,Lombardi,W.J.,& Higgins,E.T.(1988). Automaticity of chronically accessible constructs in person x situation effects on person perception: It's just a matter of time. Journal of personality and social psychology,55 (4),599-605.

Barnard,W.A.& Benn,M.S.(1988) Belief congruence and prejudice reduction in an interracial contact setting. Journal of social psychology,128.(1),125-134.

Basson,C.J.(1974). Level of self-esteem as a factor influencing person perception. Unpublished master's thesis: University of Natal.

Baumeister,R.F.(1987). How adolescence became the struggle for self: A historical transformation of psychological development. Journal of personality and social psychology, 52, 163-176.

Baumeister,R.F.(1989). Social intelligence and the construction of meaning in life. In J.F.,Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 11, Social intelligence and cognitive assessments of personality. Hillsdale: Lawrence Erlbaum.

Baumeister,R.F.,& Tice, D.M.(1986). How adolescence became the struggle for self: A historical transformation of psychological development. In Suls,J.,& Greenwald,A.G. (Eds.), Psychological perspectives on the self. Hillsdale, New Jersey: Lawrence Erlbaum.

Bem,D.J.(1978). Self-perception theory. In Berkowitz, L.(Ed.) Cognitive theories in social psychology. New York: Academic press.

Berelson,B.(1954). Content Analysis. In Lindzey,G.(Ed.) Handbook of social psychology, Vol 1. Cambridge MA: Addison-Wesley.

Biesheuvel,S.(1987). Cross-cultural psychology: Its relevance to South Africa. In Mauer,K.F.& Retief,A.I.(Eds). Psychology in context: Cross-cultural research trends in South Africa. Pretoria: HSRC.

Bodenhausen,G.V.(1988). Stereotypic biases in social decision making and memory. Journal of personality and social psychology, 55,(5),726-737.

Bodenhausen,G.V.,& Wyer,R.S.(1985). Effects of stereotypes on decision making and information-processing strategies. Journal of personality and social psychology,48,267-282.

Bodenhausen,G.V.,& Lichtenstein,M.(1987). Social stereotypes and information processing strategies: The impact of task complexity. Journal of personality and social psychology, 52,(5),871-880.

Boski,P.(1988). Cross-cultural studies of person perception: Effects of ingroup \ outgroup membership and ethnic schemata. Journal of cross-cultural psychology,19,(3), 287-328.

Breckler,S.J.(1984). Empirical validation of affect, behaviour and cognition as distinct components of attitude. Journal of personality and social psychology,47,1191-1205.

Breckler,S.J.,& Greenwald,A.G.(1986). Motivational facets of the self. In Sorrentino,R.M.,& Higgins,E.T.,(Eds.). Handbook of motivation and cognition. Foundations of social behavior. New York: Guilford.

Brewer,M.B.(1988). A dual process model of impression formation. In Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 1, A dual process model of impression formation. Hillsdale: Lawrence Erlbaum.

Brewer,M.B.(1991). Toward a social psychology of prejudice. Contemporary psychology, 36,(2), 127-128.

Brewer,M.B.,& Kramer,R.M.(1985). The psychology of intergroup attitudes and behavior. Annual review of psychology, 36, 219-243.

Bruner,J.(1986). Actual minds, possible worlds. Cambridge,Mass.: Harvard University press.

Burman,S.& Reynolds,P.(Eds).(1986). Growing up in a divided society. Johannesburg: Ravan.

Burns,R.B.(1979). The self concept. London: Longman.

Burns,R.B.(1982). Self-concept development and education. London: Holt,Rinehart & Winston.

Byrne,B.(1984). The general/academic self-concept nomological network: A review of construct validation research. Review of educational research,54 (3),427-456.

Cacioppo,J.T.,Petty,R.E.,& Geen,T.R.(1989). Attitude structure and function: From the tripartite to the homeostasis model of attitudes. In Pratkanis,A.R., Breckler,S.J.& Greenwald, A.G. (Eds.). Attitude structure and function. Hillsdale, New Jersey: Lawrence Erlbaum.

Campbell,D.T.(1978). Recommendations for APA standards regarding construct, trait, or discriminant validity. In Jackson,D.N.,& Messick,S.(Eds.), Problems in human assessment. New York: Krieger.

Campbell,J.D.(1990). Self-esteem and clarity of the self-concept. Journal of personality and social psychology,59 (3),538-549.

Cantor,N.,& Kihlstrom,J.F.(1989). Social intelligence and cognitive assessments of personality. In J.F.,Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 11, Social intelligence and cognitive assessments of personality. Hillsdale: Lawrence Erlbaum.

Cantor,N.,Markus,H.,Niedenthal,P.,& Nurius,P.(1986). On motivation and the self-concept. In Sorrentino,R.M.,& Higgins,E.T.,(Eds.). Handbook of motivation and cognition. Foundations of social behavior. New York: Guilford.

Chaiken,S.& Stangor,C.(1987). Attitudes and attitude change. In Rosenzweig,M.R.& Porter,L.W.(Eds.), Annual review of psychology, 38, 575-630.California: Annual reviews.

Cohen,A.R.(1968). Some implications of self-esteem for social influence. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Combs,A.W.,Richards,A.C.,& Richards,F.(1976). Perceptual psychology. New York: Harper & Row.

Cooley,C.H.(1968). The social self: On the meanings of "I". In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Cooley,C.H.(1968). The social self: On the varieties of self-feeling. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Coopersmith,S.(1967). The antecedents of self-esteem. San Francisco: Freeman.

Coopersmith,S.(1981). Self-esteem inventories. Palo Alto, California: Consulting psychologists press.

Crocker,J.(1993). Memory for information about others: Effects of self-esteem and performance feedback. Journal of research in personality, 27, 35-48.

Crocker,J.,Thompson,L.,McGraw,K.M.,& Ingerman,C.(1987). Downward comparison, prejudice and evaluation of others: Effects of self esteem and threat. Journal of personality and social psychology, 52,(5),907-916.

Cronbach,L.J.(1983). Designing evaluations of educational and social programmes. San Francisco: Jossey Bass.

Cronbach,L.J.,& Meehl,P.E.(1978). Construct validity in psychological tests. In Jackson,D.N.,& Messick,S.(Eds.), Problems in human assessment. New York: Krieger.

Curtis,R.C.,(Ed.),(1991). The relational self: Theoretical convergences in psychoanalysis and social psychology. London, New York: Guilford.

Damon,W.,& Hart,D.(1988). Self understanding in childhood and adolescence. Cambridge: Cambridge University press.

Dawes,R.M.,& Smith,T.L.(1985). Attitude and opinion measurement. In Lindzey,G.,& Aronson,E.(Eds.), Handbook of social psychology, Third edition, Vol 1. (pp.509-566). New York: Random House.

Desforges,D.M.,Lord,C.G.,Ramsey,S.L.,Mason,J.A.,van Leeuwen,M.D., et al.(1991). Effects of structured cooperative contact on changing negative attitudes toward stigmatized social groups. Journal of personality and social psychology, 60,(4),531-544.

Devine,P.G.(1989). Automatic and controlled processes in prejudice: the role of stereotypes and personal beliefs. In Pratkanis,A.R.,Breckler,S.J.& Greenward,A.G.(Eds.) Attitude structure and function. Hillsdale, New Jersey: Lawrence Erlbaum.

Devine,P.G.,Monteith,M.J.,Zuwerink,J.R.,& Elliot,A.J.(1991). Prejudice with and without compunction. Journal of personality and social psychology, 60,(6),817-830.

Devine,P.G.,Sedikides,C.,& Fuhrman,R.W.(1989). Goals in social information processing: The case of anticipated interaction. Journal of personality and social psychology, 56,(5),680-690.

Dovidio,J.H.,Evans,N.,& Tyler,R.B.(1986). Racial stereotypes: the contents of their cognitive representations. Journal of experimental social psychology, 22,22-37.

Duckitt,J.(1990). A social psychological investigation of racial prejudice among white South Africans. Unpublished doctoral thesis: University of Witwatersrand.

Duckitt,J.(1991). The development and validation of a subtle racism scale in South Africa. South African journal of psychology, 21,(4),233-239.

Duckitt,J.(1991). Prejudice and racism. In Foster,D.& Louw-Potgieter,J.(Eds.) Social psychology in South Africa. Johannesburg: Lexicon.

Duckitt,J.(1993). Further validation of a subtle racism scale in South Africa. South African journal of psychology, 23,(3),116-119.

Duckitt,J.,& Foster,D.(1991). Introduction to the special issue: Race, social attitudes, and prejudice. South African journal of psychology, 21,(4),199-202.

Edwards,D.J.A.(1984). Perception of personality and social behaviour in different racial groups by black and white university students. South African journal of psychology,14, (3),79-89.

Edwards,K.(1990). The interplay of affect and cognition in attitude formation and change. Journal of personality and social psychology,59 (2),202-216.

Eiser,J.R.,& van der Pligt,J.(1988). Attitudes and decisions. London: Routledge.

Eitan,T.,Amir,Y.,& Rich,Y.(1992). Social and academic treatments in mixed-ethnic classes and change in student self-concept. British journal of educational psychology, 62 364-374.

Epstein,J.(1985). Review of Piers-Harris self-concept scale. In J.V.Mitchell (Ed.), Ninth mental measurements yearbook. (pp.1168-1169). Lincoln: University of Nebraska Press.

Epstein,S.(1973). The self-concept revisited: Or a theory of a theory. American psychologist,28,404-416.

Epstein,S.(1991). Cognitive-experiential self-theory: An integrative theory of personality. In Curtis,R.C.,(Ed.), The relational self: Theoretical convergences in psychoanalysis and social psychology. London, New York: Guilford.

Epstein,S.,& Feist,G.J.(1988). Relation between self- and other- acceptance and its moderation by identification. Journal of personality and social psychology,54 (2),309-315.

Epstein,S.,Lipson,A.,Holstein,C.,& Huh,E.(1992). Irrational reactions to negative outcomes: Evidence for two conceptual systems. Journal of personality and social psychology, 62,(2),328 -339.

Erikson,E.H.(1968). Identity and identity diffusion. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Fazio,R.H.,Lenn,T.M.,& Effrein,E.A.(1984). Spontaneous attitude formation. Social cognition, 2, 217-234.

Ferguson,M.G.(1992). An evaluation of the Sawubona Dialogue Programme. Unpublished evaluation: University of Natal.

Figurski,T.J.(1987). Self-awareness and other-awareness: The use of perspectives in everyday life. In Honess,T.&

Yardley,K.(Eds.) Self and identity: Psychosocial perspectives. London: John Wiley.

Fiske,S.T.(1988). Compare and contrast: Brewer's dual process model and Fiske et al.'s continuum model. In Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 1, A dual process model of impression formation. Hillsdale: Lawrence Erlbaum.

Fiske,S.T.(1992). Thinking is for doing: Portraits of social cognition from daguerreotype to laserphoto. Journal of personality and social psychology,63, (6), 877-889.

Fiske,S.T.(1993). Social cognition and social perception. In Rosenzweig,M.R.& Porter,L.W.(Eds.), Annual review of psychology, 44, 155-194. California: Annual reviews.

Fiske,S.T.,& Neuberg,S.L.(1989). Category-based and individuating processes as a function of information and motivation: Evidence from our laboratory. In Bar-Tal,D.,Graumann,C.F.,Kruglanski,A.W., & Stroebe,W.(Eds.) Stereotyping and prejudice: Changing conceptions. New York: Springer-Verlag.

Fiske,S.T.,& Neuberg,S.L.(1990). A continuum of impression formation, from category-based to individuating processes: Influences of information and motivation on attention and interpretation. In Berkowitz,L.(Ed.), Advances in experimental social psychology, Vol 23, pp 1-74. San Diego: Academic Press.

Fiske,S.T.,& Pavelchak,M.A.(1986). Category-based versus piecemeal-based affective responses: Developments in schema-triggered affect. In Sorrentino,R.M.,& Higgins,E.T.,(Eds.). Handbook of motivation and

cognition. Foundations of social behavior. New York: Guilford.

Fiske,S.T.,& Von Hendy,H.M.(1992). Personality feedback and situational norms can control stereotyping processes. Journal of personality and social psychology, 62 (4),577-596.

Ford,T.E.,& Stangor,C.(1992). The role of diagnosticity in stereotype formation: Perceiving group means and variances. Journal of personality and social psychology,63, (1), 356-367.

Foster,D.(1991). `Race' and racism in South African psychology. South African journal of psychology, 21,(4),203-210.

Foster,D.(1991). A note on attitude measurement. In Foster,D.& Louw-Potgieter,J.(Eds.) Social psychology in South Africa. Johannesburg: Lexicon.

Foster,D.(1986). The development of racial orientation in children: A review of South African research. In Burman,S.& Reynolds,P.(Eds).(1986). Growing up in a divided society. Johannesburg: Ravan.

Foster,D.,& Nel,E.(1991) Attitudes and related concepts. In Foster,D.& Louw-Potgieter,J.(Eds.) Social psychology in South Africa. Johannesburg: Lexicon.

Gaertner,S.L.,Mann,J.A.,Dovidio,J.F.,Murrell,A.J.,& Pomare,M.(1990). How does intergroup cooperation reduce intergroup bias. Journal of personality and social psychology, 59, 692-704.

Gecas,V.& Mortimer,J.T.(1987). Stability and change in the self-concept from adolescence to adulthood. In

Honess,T.& Yardley,K.(Eds.) Self and identity: Perspectives across the lifespan. London: John Wiley.

Gergen,K.J.(1968). Personal consistency and the presentation of self. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Gergen,K.J.(1987). Toward self as relationship. In Honess,T.& Yardley,K.(Eds.) Self and identity: Psychosocial perspectives. London: John Wiley.

Gilbert,D.T.,& Hixon,J.G.(1991). The trouble of thinking: Activation and application of stereotypic beliefs. Journal of personality and social psychology, 60,(4),509-517.

Gordon,C.(1968). Self-conceptions: Configurations of content. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Greenwald,A.G.(1989). Why attitudes are important: Defining attitude and attitude theory 20 years later. In Pratkanis,A.R.,Breckler,S.J.& Greenwald,A.G.(Eds.) Attitude structure and function. Hillsdale: Lawrence Erlbaum.

Greenward,A.G.(1990). What cognitive representations underlie social attitudes? Bulletin of the psychonomic society,128,(3), 254-260.

Groenewald,C.J.(1990). Evaluasie van verhoudings organisasies in die Wes-Kaap aan die hand van die kontakhipotese.South African journal of sociology,21 (2),112-118.

Hamilton,D.L.,Driscoll,D.M.,& Worth,L.T.(1989). Cognitive organisation of impressions: Effects of incongruency in complex representations. Journal of personality and social psychology, 57,(6),925-939.

Hamilton,D.L.,Dugan,P.M.,& Trolier,T.K.(1985). The formation of stereotypic beliefs: further evidence for distinctiveness-based illusory correlations. Journal of personality and social psychology,48,5-17.

Hamilton,D.L.& Gifford,R.K.(1976). Illusory correlation in interpersonal perception: A cognitive basis of stereotypic judgments. Journal of experimental social psychology,12, 392-407.

Hart,D.,Maloney,J.,& Damon,W.(1987). The meaning and development of identity. In Honess,T.& Yardley,K.(Eds.) Self and identity: Psychosocial perspectives. London: John Wiley.

Harter,S.(1986). Processes underlying the construction, maintenance, and enhancement of the self-concept in children. In Suls,J.,& Greenwald,A.G.(Eds.), Psychological perspectives on the self.(Vol.3). Hillsdale, New Jersey: Lawrence Erlbaum.

Harter,S.(1990). Developmental differences in the nature of self-representations: Implications for the understanding, assessment, and treatment of maladaptive behavior. Cognitive therapy and research,14 (2),113-142.

Hewstone,M.(1989). Changing stereotypes with disconfirming information. In Bar-Tal,D.,Graumann,C.F.,Kruglanski,A.W.,& Stroebe,W.(Eds.) Stereotyping and prejudice: Changing conceptions. New York: Springer-Verlag.

Hewstone,M.,Islam,M.R.,& Judd,C.M.(1993). Models of cross category and intergroup relations. Journal of personality and social psychology, 64,(5),779-793.

Hickson,J.,Christie,G.,& Shunkler,D.(1990). A pilot study of world views of black and white South African adolescent pupils: Implications for cross-cultural counselling. South African journal of psychology, 20, (3),170-177.

Higgins,E.T.,& Bargh,J.A.(1987). Social cognition and social perception. In Rosenzweig,M.R.& Porter,L.W.(Eds.), Annual review of psychology, 38, 369-425. California: Annual reviews.

Hlongwane,M.M.,& Basson,C.J.(1990). Self-concept enhancement of black adolescents using T A in a group context. School psychology international, 11,(2),99-108.

Hoelter,J.W.(1985). The structure of self-conception: Conceptualization and measurement. Journal of personality and social psychology,49,(5),1392-1407.

Holsti,O.R.(1969). Content analysis for the social sciences and humanities. Reading MA: Addison-Wesley.

Howcroft,G.(1990). The self-esteem of black university students. South African journal of sociology,21,(1),31-36.

Ickes,W.(1984). Compositions in black and white: Determinants of interaction in interracial dyads. Journal of personality and social psychology,47,330-341.

James,W.(1890). The principles of psychology. New York: Henry Holt.

James,W.(1968). The self. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol1. New York: John Wiley & Sons.

Jamieson,D.W.,& Zanna,M.P.(1989). Need for structure in attitude formation and expression. In Pratkanis,A.R., Breckler,S.J.& Greenwald, A.G. (Eds.) Attitude structure and function. Hillsdale, New Jersey: Lawrence Erlbaum.

Jeske,P.J.(1985). Review of Piers-Harris self-concept scale. In J.V.Mitchell (Ed.), Ninth mental measurements yearbook. (pp.1169-1170). Lincoln: University of Nebraska Press.

Jones,E.E.(1988). Impression formation: What do people think about. In Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 1, A dual process model of impression formation. Hillsdale: Lawrence Erlbaum.

Jones,E.E.,& Thibaut,J.W.(1958). Interaction goals as bases of interference in interpersonal perception. In Tagiuri,R.,& Petrullo,L. (Eds.), (1958). Person perception and interpersonal behavior. Stanford: Stanford University Press.

Judd,C.M.,& Park,B.(1988). Out-group honogeneity: Judgments of variability at the individual and group levels. Journal of personality and social psychology, 54,(5),778-788.

Judd,C.M.,& Park,B.(1993). Definition and assessment of accuracy in social stereotypes. Psychological review, 100,(1),109-128.

Jussim,L.(1986). Self-fulfilling prophecies: A theoretical and integrative review. Psychological review, 93,(4), 429-445.

Kagitçibasi,Ç.,& Berry,J.W.(1989). Cross-cultural psychology: Current research and trends. Annual review of psychology,40, 493-.

Katz,I.,& Hass,R.G.(1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. Journal of personality and social psychology, 55,(6), 893-905.

Keeves,J.P.(Ed.),(1988). Educational research, methodology and measurement: An international handbook. Oxford:Pergamon.

Kelly,G.A.(1955). The psychology of personal constructs. New York: Norton.

Kenny,D.A.(1985). Quantitative methods for social psychology. In Lindzey,G.,& Aronson,E.(Eds.), Handbook of social psychology, Third edition, Vol1. New York: Random House.

Keppel,G.,& Saufley,W.H.(1980). Design and analysis. New York: W.H.Freeman.

Kerlinger,F.N.(1986). Foundations of behavioral research. Third edition. Japan: CBS College Publishing.

Kihlstrom,J.F.,Cantor,N.,Albright,J.S.,Chew,B.R.,Klein, S.B. & Niedenthal,P.M.(1988). Information processing and the study of the self. In Berkowitz,L.(Ed.), Advances in experimental social psychology, Vol 21, pp.145-178. San Diego: Academic Press.

Kirkpatrick,L.A.,& Epstein,S.(1992). Cognitive-experiential self-theory and subjective probability: Further evidence for two conceptual systems. Journal of personality and social psychology,63, (4),534-544.

Klatzky,R.L.,& Andersen,S.M.(1988). Category-specificity effects in social typing and personalizaation. In Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 1, A dual process model of impression formation. Hillsdale: Lawrence Erlbaum.

Kreitler,S.& Kreitler,H.(1987). The psychosemantic aspects of the self. In Honess,T.& Yardley,K.(Eds.) Self and identity: Perspectives across the lifespan. London: John Wiley.

Krueger,J.,& Rothbart,M.(1988). Use of categorical and individuating information in making inferences about personality. Journal of personality and social psychology,55, (2), 187-195.

Krueger,J.,Rothbart,M.,& Siram,N.(1988). Category learning and change: Differences in sensitivity to information that enhances or reduces intercategory distinctions. Journal of personality and social psychology, 56, 866-875.

Lambert,A.J.,& Wyer,R.S.(1990). Stereotypes and social judgment: The effects of typicality and group heterogeneity. Journal of personality and social psychology, 59,(4),676-691.

Langer,E.J.,Bashner,R.S.,& Chanowitz,B.(1985). Decreasing prejudice by increasing discrimination. Journal of personality and social psychology,49,113-120.

Leippe,M.R.(1991). A self-image analysis of persuasion and attitude involvement. In Curtis,R.C.,(Ed.), The relational self: Theoretical convergences in psychoanalysis and social psychology. London, New York: Guilford.

Levine,J.M.,Resnick,L.B.,& Higgins,E.T.(1993). Social foundations of cognition. In Rosenzweig,M.R.& Porter,L.W.(Eds.), Annual review of psychology, 44, 585-612. California: Annual reviews.

Linville P.W.,& Clark,L.F.(1989). Production systems and social problem solving: Specificity, flexibility and expertise. In J.F.,Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 11, Social intelligence and cognitive assessments of personality. Hillsdale: Lawrence Erlbaum.

Little,B.R.(1987). Personal projects and fuzzy selves: Aspects of self-identity in adolescence. In Honess,T.& Yardley,K.(Eds.) Self and identity: Perspectives across the lifespan. London: John Wiley.

Livesley,W.J.,& Bromley,D.B.(1973). Person perception in childhood and adolescence. New York: Wiley & Sons.

Long,T.J.(1993). Racial attitudes and self-esteem in a student leaders training school. Unpublished master's thesis: University of Natal.

Lord,C.G.,Lepper,M.R.,& Preston,E.(1984). Considering the opposite: A corrective strategy for social judgment. Journal of personality and social psychology, 47, 1231-1243.

Louw-Potgieter,J.(1988). The authoritarian personality: An inadequate explanation for intergroup conflict in South Africa. Journal of social psychology,128,(1), 75-88.

Louw-Potgieter,J.,Kamfer,L.,& Boy,R.G.(1991). Stereotype reduction workshop. South African journal of psychology, 21,(4),219-224.

Malloy,T.E.,& Albright,L.(1990). Interpersonal perception in a social context. Journal of personality and social psychology, 58,(3),419-428.

Manfredo,M.J.& Shelby,B.(1988). The effect of using self-report measures in tests of attitude-behaviour relationships. Journal of social psychology,128, (6), 731-743.

Marjoribanks,K.& Jordan,D.F.(1986). Stereotyping among Aboriginals and Anglo-Aboriginals.Journal of cross-cultural psychology,17,(1).

Markova,I.(1987). Knowledge of the self through interaction. In Honess,T.& Yardley,K.(Eds.) Self and identity: Psychosocial perspectives. London: John Wiley.

Markus,H.(1977). Self-schemata and processing information about self. Journal of personality and social psychology,35, 68-78.

Markus,H.(1990) Unresolved issues of self-representation. Cognitive therapy and research 14 (2), 241-253.

Markus,H.,& Kitayama,S.(1991). Culture and the self: Implications for cognition, emotion, and motivation. Psychological review,98 (2),224-253.

Markus,H.,& Kunda,Z.(1986). Stability and malleability of the self-concept. Journal of personality and social psychology,51 (4),858-866.

Markus,H.,& Nurius,P.(1987). Possible selves: The interface between motivation and the self-concept. In Honess,T.& Yardley,K.(Eds.) Self and identity: Psychosocial perspectives. London: John Wiley.

Markus,H.,Smith,J.,& Moreland,R.L.(1985). Role of the self concept in the perception of others. Journal of personality and social psychology,49, 1494-1512.

Markus,H.,& Wurf,E.(1987). The dynamic self-concept: A social psychological perspective. In Rosenzweig,M.R.& Porter,L.W.(Eds.), Annual review of psychology, 38, 299-337. California: Annual reviews.

Markus,H.,& Zajonc,R.B.(1985). The cognitive perspective in social psychology. In Lindzey,G.,& Aronson,E.(Eds.), Handbook of social psychology, Third Edition, Vol 1. (pp.137-230).New York: Random House.

Marsh,H.W.(1986). Global self-esteem: Its relation to specific facets of self-concept and their importance. Journal of personality and social psychology,51 (6),1224-1236.

Marsh,H.W.,& Shavelson,R.(1985). Self-concept: Its multifaceted, hierarchical structure. Educational psychologist,20, (3),107-123.

Marsh,H.W.,Barnes,J.,& Hocevar,D.(1985). Self-other agreement on multidimensional self-concept ratings: Factor analysis and multitrait-multimethod analysis. Journal of personality and social psychology,49, (5), 1360-1377.

Marsh,H.W.,Richards,G.E.,(1988). Tennessee self-concept scale: Reliability, internal structure, and construct validity. Journal of personality and social psychology,55 (4),612-624.

Marsh,H.W.,Richards,G.E.,& Barnes,J.(1986). Multidimensional self-concepts: The effect of

participation in an Outward Bound program. Journal of personality and social psychology,50 (1),195-204.

Maslow,A.H.(1968). Peak-experiences as acute identity-experiences. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Mboya,M.M.(1988). A comparative analysis of the self-concept and academic achievement of black and white high school students. School psychology international,9,197-201.

McCall,G.J.(1987). The structure, content, and dynamics of self: Continuities in the study of role-identities. In Honess,T.& Yardley,K.(Eds.) Self and identity: Psychosocial perspectives. London: John Wiley.

McCann,C.D.,Ostrom,T.M.,Tyner,L.K.,& Mitchell,M.L.(1985). Person perception in heterogeneous groups. Journal of personality and social psychology,49,(6),1449-1459.

Mcguire,W.J.(1989). The structure of individual attitudes and attitude systems. In Pratkanis,A.R.,Breckler,S.J.& Greenward,A.G. (Eds.) Attitude structure and function. Hillsdale, New Jersey: Lawrence Erlbaum.

Mcguire,W.J.& McGuire,C.V.(1987). Developmental trends and gender differences in the subjective experience of self. In Honess,T.& Yardley,K.(Eds.) Self and identity: Perspectives across the lifespan. London: John Wiley.

McGuire,W.J.,& McGuire,C.V.(1986). Differences in conceptualizing self versus conceptualizing other people as manifested in contrasting verb types used in natural speech. Journal of personality and social psychology, 51,(6),1135-1143.

McNulty,S.E.,& Swann,W.B.(1991). Psychotherapy, self-concept change, and self-verification. In Curtis,R.C.,(Ed.), The relational self: Theoretical convergences in psychoanalysis and social psychology. London, New York: Guilford.

Mead,G.H.(1968). The genesis of the self. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley.

Medin,D.L.(1988). Social categorisation: Structures, processes and purposes. In Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 1, A dual process model of impression formation. Hillsdale: Lawrence Erlbaum.

Meindel,J.R.,& Lerner,M.J.(1985). Exacerbation of extreme responses to an out-group. Journal of personality and social psychology,47,71-84.

Millar,M.G.,& Millar,K.U.(1990). Attitude change as a function of attitude type and argument type. Journal of personality and social psychology,59 (2),217-228.

Miller,D.T.,& Turnbull,W.(1986). Expectancies and interpersonal processes. Annual review of psychology, 37, 233-256.

Mynhardt,J.& du Toit,A.(1991). Contact and change. In Foster,D.& Louw-Potgieter,J.(Eds.) Social psychology in South Africa. Johannesburg: Lexicon.

Neuberg,S.L.(1989). The goal of forming accurate impressions during social interactions. Journal of personality and social psychology, 56,(3),374-386.

Neuberg,S.L.,& Fiske,S.T.(1987). Motivational influences on impression formation: outcome dependency, accuracy-

driven attention, and individuating processes. Journal of personality and social psychology, 53, 431-444.

Neuberg, S.L., Judice, T.N., Virdin, L.M., & Carrillo, M.A. (1993). Perceiver self-presentation goals as moderators of expectancy influences: Ingratiation and the disconfirmation of negative expectancies. Journal of personality and social psychology, 64, (3), 409-420.

O'Sullivan, C.S. (1988). Conditional responses in person perception: The categories of our discontent. In Wyer, R.S., & Srull, T.K. (Eds.), Advances in social cognition, Vol 1, A dual process model of impression formation. Hillsdale: Lawrence Erlbaum.

Ogilvie, D.M., & Ashmore, R.D. (1991). Self-with-other representation as a unit of analysis in self-concept research. In Curtis, R.C., (Ed.), The relational self: Theoretical convergences in psychoanalysis and social psychology. London, New York: Guilford.

Olowu, A.A. (1985). Gender as a determinant of some Nigerian adolescents' self-concepts. Journal of adolescence, 8 (4), 347-355.

Olson, J.M., & Zanna, M.P. (1993). Attitudes and attitude change. In Rosenzweig, M.R. & Porter, L.W. (Eds.), Annual review of psychology, 44, 117-154. California: Annual reviews.

Oyserman, D., & Markus, H.R. (1990). Possible selves and delinquency. Journal of personality and social psychology, 59, (1), 112-125.

Park, B. (1986). A method for studying the development of impressions of real people. Journal of personality and social psychology, 51, (5), 907-917.

Park,B.,Ryan,C.S.,& Judd,C.M.(1992). Role of meaningful subgroups in explaining differences in perceived variability for in-groups and out-groups. Journal of personality and social psychology,63 (4),553-567.

Pavelchak,M.A.(1989). Piecemeal and category-based evaluation: An idiographic analysis. Journal of personality and social psychology, 56,(3),374-386.

Pelham,B.W.,(1991). On confidence and consequence: The certainty and importance of self-knowledge. Journal of personality and social psychology, 60,(4),518-530.

Pervin L.A.,(1989). Psychodynamic-systems reflections on a social-intelligence model of personality. In J.F.,Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 11, Social intelligence and cognitive assessments of personality. Hillsdale: Lawrence Erlbaum.

Phinney,J.S.(1990). Ethnic identity in adolescents and adults: Review of research. Psychological bulletin, 108,(3),499-514.

Phinney,J.S.,& Alipuria,L.L.(1990). Ethnic identity in college students from four ethnic groups. Journal of adolescence,13 (1),171-183.

Piers,E.V.(1984). Pier's-Harris children's self-concept scale. (Revised manual). L.A.,California: Western Psychological Services.

Pratkanis,A.R.(1989). The cognitive representation of attitudes. In Pratkanis,A.R., Breckler,S.J.& Greenwald, A.G. (Eds.) Attitude structure and function. Hillsdale, New Jersey: Lawrence Erlbaum.

Pratkanis,A.R.,Breckler,S.J.& Greenwald,A.G.(Eds.)(1989). Attitude structure and function. Hillsdale, New Jersey: Lawrence Erlbaum.

Prentice,D.A.(1990). Familiarity and differences in self- and other-representations. Journal of personality and social psychology,59,(3),369-383.

Rajecki,D.W.(1990). Attitudes. (2nd Ed.). Sunderland, Massachusetts: Sinauer.

Ray,J.J.,& Heaven,C.L.(1984). Conservatism and authoritarianism among urban Afrikaners.Journal of social psychology,122,163-170.

Retief,A.(1988). Method and theory in cross-cultural psychological assessment. HSRC Investigation into Research Methodology. Research report series 4 & 6.

Rogers,C.R.(1968). The significance of the self-regarding attitudes and perceptions. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Rosenberg,M.(1986). Self-concept from middle childhood through adolescence. In Suls,J.,& Greenwald,A.G.(Eds.) Psychological perspectives on the self. (Vol.3). Hillsdale, New Jersey: Lawrence Erlbaum.

Rosenberg,M.(1968). Psychological selectivity in self-esteem formation. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Rothbart,M.(1988). Categorization and impression formation: Capturing the mind's flexibility. In Wyer,R.S.,& Srull,T.K. (Eds.), Advances in social

cognition, Vol 1, A dual process model of impression formation. Hillsdale: Lawrence Erlbaum.

Rothbart,M.,& John,O.P.(1985). Social categorisation and behavioral episodes: A cognitive analysis of the effects of intergroup contact. Journal of social issues,41, (3),81-104.

Rothbart,M.,& Lewis,S.(1988). Inferring category attitudes from exemplar attributes: geometric and social categories. Journal of personality and social psychology, 55,(6),861-872.

Ruscher,J.B.,& Fiske,S.T.(1990). Interpersonal competition can cause individuating processes. Journal of personality and social psychology, 58,(5),832-843.

Safran,J.D.,Segal,Z.V.,Hill,C.& Whiffen,V.(1990). Refining strategies for research on self-representations in emotional disorders. Cognitive therapy and research,14 (2),143-160.

Safran,J.D.,Vallis,T.M.,Segal,Z.V.,& Shaw,B.F.(1986). Assessment of core cognitive processes in cognitive therapy. Cognitive therapy and research,10 (5),509-526.

Sanbonmatsu,D.M.,& Fazio,R.H.(1990). The role of attitudes in memory-based decision making. Journal of personality and social psychology,59 (4),614-622.

Sande,G.N.,Goethals,G.R.,& Radloff,C.E.(1988). Perceiving one's own traits and others': The multifaceted self. Journal of personality and social psychology, 54 (1), 13-20.

Sanders,W.B.,Pinhey,T.K.(1983). The conduct of social research. New York: Holt, Rinehart and Winston.

Schaller,M.(1992). In-group fovoritism and statistical reasoning in social inference: Implications for formation and maintenance of group stereotypes. Journal of personality and social psychology,63, (1), 61-74.

Schaller,M.,& Maass,A.(1989). Illusory correlation and social categorisation: Toward an integration of motivational and cognitive factors in stereotype formation. Journal of personality and social psychology, 56,(5),709-721.

Schneider,D.J.(1991). Social cognition. Annual review of psychology,42, 527-561.

Schul,Y.,& Burnstein,E.(1990). Judging the typicality of an instance: Should the category be accessed first. Journal of personality and social psychology, 58,(6), 964-974.

Shavitt,S.(1989). Operationalizing functional theories of attitude.In Pratkanis,A.R.,Breckler,S.J.& Greenward,A.G.(Eds.) Attitude structure and function. Hillsdale, New Jersey: Lawrence Erlbaum.

Sherman,R.C.(1988). Are two modes better than one? A critique of Brewer's dual process model. In Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 1, A dual process model of impression formation. Hillsdale: Lawrence Erlbaum.

Sherman,S.J.,Judd,C.M.& Park,B.(1989). Social cognition.Annual review of psychology,40, 281-326.

Simmons,R.G.(1987). Self-esteem in adolescence. In Honess,T.& Yardley,K.(Eds.) Self and identity: Perspectives across the lifespan. London: Routledge & Kegan Paul.

Smith,E.R.(1988). Impression formation in a general framework of social and nonsocial cognition. In Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 1, A dual process model of impression formation. Hillsdale: Lawrence Erlbaum.

Smith,E.R.,& Zarate,M.A.(1992). Exemplar-based model of social judgment. Psychological review.99,(1),3-21.

Smith,E.R.,& Zarate,M.A.(1990). Exemplar and prototype use in social categorisation. Social cognition.8,(3), 243-262.

Smith,E.R.,& Lerner,M.(1986). Development of automatism of social judgements. Journal of personality and social psychology, 50, 246-259.

Sorrentino,R.M.,& Higgins,E.T.,(Eds.),(1986). Handbook of motivation and cognition. Foundations of social behavior. New York: Guilford.

Squire,L.R.,Knowlton,B.& Musen,G.(1993). The structure and organisation of memory. In Rosenzweig,M.R.& Porter,L.W.(Eds.), Annual review of psychology, 44, 453-495.California: Annual reviews.

Srull,T.K.,& Wyer,R.S.(1989). Person memory and judgment. Psychological review,96, 58-83.

Stewart,R.A.,Powell,G.E.,& Chetwynd,S.J.,(1979). Person perception and stereotyping. Farnborough: Saxon House.

Stroebe,W.,& Insko,C.A.(1989). Stereotype, prejudice, and discrimination: Changing conceptions in theory and research. In Bar-Tal,D.,Graumann,C.F.,Kruglanski,A.W.,& Stroebe,W.(Eds.) Stereotyping and prejudice: Changing conceptions. New York: Springer-Verlag.

Stryker,S.(1987). Identity theory: Developments and extensions. In Honess,T.& Yardley,K.(Eds.) Self and identity: Psychosocial perspectives. London: Routledge & Kegan Paul.

Stryker,S.,& Statham,A.(1985). Symbolic interaction and role theory. In Lindzey,G.,& Aronson,E.(Eds.), Handbook of social psychology, Third Edition, Vol 1. (pp.311-378). New York: Random House.

Sullivan,H.S.(1968). Beginnings of the self system. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Suls,J.,& Greenwald,A.G.(Eds.),(1986). Psychological perspectives on the self. Hillsdale, New Jersey: Lawrence Erlbaum.

Swann,W.B.(1983). Self-verification: Bringing social reality into harmony with the self. In Suls,J.,& Greenwald,A.G. (Eds.) Psychological perspectives on the self.(Vol.3). Hillsdale, New Jersey: Lawrence Erlbaum.

Swann,W.B.(1984). Quest for accuracy in person perception: A matter of pragmatics. Psychological review,93, 457-477.

Swann,W.B.Jr.,Pelham,B.W.,& Chidester,T.R.(1988). Change through paradox: Using self-verification to alter beliefs. Journal of personality and social psychology,54 (2),268-273.

Swann,W.B.Jr.,Stein-Seroussi,A.,& McNulty,S.E.(1992). Outcasts in a white-lie society: The enigmatic worlds of people with negative self-conceptions. Journal of personality and social psychology,62 (4),618-624.

Tagiuri,R.(1969). Person perception. In Lindzey,G.,& Aronson,E.(Eds.), Handbook of social psychology, Second Edition, Vol 3. (pp.395-449). Reading: Addison-Wesley.

Tagiuri,R.,& Petrullo,L.(Eds.),(1958). Person perception and interpersonal behavior.Stanford: Stanford University.

Tanzer,N.(1992). Self-concept of Australian and Singaporean children - a cross-cultural comparison. International journal of psychology,27 (3-4),563.

Tesser,A.,& Campbell,J.(1983). Self-definition and self-evaluation maintenance. In Suls,J.,& Greenwald,A.G.(Eds.), Psychological perspectives on the self.(Vol.2) Hillsdale, New Jersey: Lawrence Erlbaum.

Tesser,A.,& Shaffer,D.R.(1990). Attitudes and attitude change. Annual review of psychology, 41. 479-523.

Thiele,G.A.(1991). Veranderinge en stabiliteit in die evaluatiewe stereotipes van blankes en kleurlinge in Suid-Afrika: 1973-1980/84. South African journal of psychology, 21,(4),211-218.

Tice,D.M.(1992). Self-concept change and self-preservation - The looking-glass self is also a magnifying glass. Journal of personality and social psychology,63 (3),435-451.

Trafimow,D.,Triandis,H.C.,& Goto,S.G.(1991). Some tests of the distinction between the private self and the collective self. Journal of personality and social psychology, 60,(5),649-655.

Triandis, H.C.,Bontempo,R.,Leung,K.,& Hui,C.H.(1990).A method for determining cultural, demographic, and

personal constructs. Journal of cross-cultural psychology, 21 (3),302-318.

Triandis,H.C.(1989). The self and social behavior in differing cultural contexts. Psychological review,96, (3),506-520.

Turner,R.H.(1968). The self conception in social interaction. In Gordon,C.& Gergen,K.J.(Eds.) The self in social interaction. Vol 1. New York: John Wiley & Sons.

Turner,R.H.(1987). Articulating self and social structure. In Honess,T.& Yardley,K.(Eds.) Self and identity: Psychosocial perspectives. London: John Wiley.

Tyson,G.A.,Schlachter,A.& Cooper,S.(1988). Game playing strategy as an indicator of racial prejudice among South African students. Journal of social psychology,128,(4),473-485.

Verma,G.K.,& Bagley,C.(Eds.),(1982). Self-concept, achievement and multi-cultural education. London: MacMillan.

Verma,G.K.,& Bagley,C.(Eds.),(1988). Cross-cultural studies of personality, attitudes and cognition. Basingstoke: MacMillan.

Weber,R.P.(1985). Basic content analysis. Beverly Hills: Sage.

Westen,D.(1991). Social cognition and object relations. Psychological bulletin, 109, 429-455.

Westen,D.(1991). Cultural, emotional, and unconscious aspects of self. In Curtis,R.C.,(Ed.), The relational

self: Theoretical convergences in psychoanalysis and social psychology. London, New York: Guilford.

Wiley,M.G.,& Alexander,C.N.(1987). From situated activity to self attribution: The impact of social structural schemata. In Honess,T.& Yardley,K.(Eds.) Self and identity: Psychosocial perspectives. London: John Wiley.

Wyer,R.S.,& Martin,L.L.(1986). Person memory: The role of traits, group stereotypes, and specific behaviors in the cognitive representation of persons. Journal of personality and social psychology, 50,(4),661-675.

Wyer,R.S.,& Srull,T.K.(1986). Human cognition in its social context. Psychological review,93, 322-359.

Wyer,R.S.,& Srull,T.K.(Eds.),(1988). Advances in social cognition, Vol 1, A dual process model of impression formation. Hillsdale: Lawrence Erlbaum.

Wyer,R.S.,& Srull,T.K.(Eds.),(1989). Advances in social cognition, Vol 11, Social intelligence and cognitive assessments of personality. Hillsdale: Lawrence Erlbaum.

Wylie,R.C.(1974). The self-concept. Lincoln: University of Nebraska Press.

Wylie,R.C.(1974). The self-concept: A review of methodological considerations and measuring instruments. (Rev.Ed.). Vol. 2. Lincoln: University of Nebraska Press.

Wylie,R.C.(1979). The self-concept: Theory and research on selected topics. (Rev.Ed.). Vol.2. Lincoln: University of Nebraska Press.

Wylie,R.C.(1979). The self-concept: Theory and research on selected topics. Vol. 2. Lincoln: University of Nebraska Press.

Wylie,R.C.(1989). Measures of self-concept. Lincoln: University of Nebraska Press.

Yardley,K.(1987). What do *you* mean `Who am I?': Exploring the implications of a self-concept measurement with subjects. In Honess,T.& Yardley,K.(Eds.) Self and identity: Psychosocial perspectives. London: John Wiley.

Zebrowitz-McArthur,L.(1988). Where is the stimulus person in impression formation? In Wyer,R.S.,& Srull,T.K.(Eds.), Advances in social cognition, Vol 1, A dual process model of impression formation. Hillsdale: Lawrence Erlbaum.

Zebrowitz,L.A.(1990). Social perception. Milton Keynes: Open University Press.

7. APPENDICES

APPENDIX A.

SAWUBONA DIALOGUE PROGRAMME OUTLINE

1. A pre-briefing session - 7 days before the residential weekend for each group of volunteers at the participating schools.

2. The Sawubona residential weekend.

Friday

16.00 Arrival and introductory session when various duties (e.g. setting the table for meals, or clearing after the meal) and house rules for the weekend were negotiated. All Sawubona staff involved in that programme were present.

18.00 Supper

19.00 Session 1 - Ice Breaker activities and games

21.00 Informal session - music and games in the students quarters, with two of the Sawubona staff

Saturday

8.00 Breakfast

9.00 Briefing on Community Service: discussion on the reasons for the abandonment of children

10.00 Community Service work party: painting the interior of the Edendale Children's Home

13.00 Lunch

14.00 Session 2 - Discussion stimulated by a video programme on the violence in Natal and questions posed by the students

18.00 Supper

19.00 Session 3 - "God Slot" directed by Sawubona staff

21.00 Informal session

Sunday 7.00 Church service - voluntary

8.00 Breakfast

9.00 Visit to Township schools and homes of the students

11.00 Session 4 - Discussion directed by Sawubona staff on Education - small groups and a plenary session

13.00 Lunch

14.00 Wrap-up session

15.00 Departure

3. Debriefing session - 7 days later at the students' schools

4. Reunion day - the following year for all the groups who had participated during the year.

During the initial planning stage two staff members responsible for the Dialogue Programme, made decisions on the format for the Programme taking into account the requests of the two groups during the pre-briefing session. There were variations in the programmes depending on the requests made by the groups and on the availability of resources, but the basic format was retained.

APPENDIX B.

FREE DESCRIPTIONS

A DESCRIPTION OF MYSELF

A DESCRIPTION OF A GIRL OF ANOTHER RACE.

A DESCRIPTION OF A BOY OF ANOTHER RACE.

APPENDIX C.

BIOGRAPHICAL DETAILS

BIOGRAPHICAL QUESTIONNAIRE.

Please complete the general background information below, which is required for statistical purposes.

Name:_____ School:_____

Standard:_____ Religion:_____

Occupation: Mother's_____ Father's:_____

Number of brothers & sisters:____ Position in family:_

Address:_____

_____

_____

APPENDIX D.

ANALYSES OF VARIANCE

* * * A N A L Y S I S O F V A R I A N C E * * *

F61 PIERS-HARRIS CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	53.331	2	26.666	1.812	.173
E#C	53.257	1	53.257	3.620	.062
RACE	.070	1	.070	.005	.945
2-way Interactions	10.403	1	10.403	.707	.404
E#C RACE	10.403	1	10.403	.707	.404
Explained	63.735	3	21.245	1.444	.240
Residual	838.593	57	14.712		
Total	902.328	60	15.039		

F43 FLUENCY, SELF, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	15.986	2	7.993	.368	.694
E#C	.441	1	.441	.020	.887
RACE	15.155	1	15.155	.697	.407
2-way Interactions	20.338	1	20.338	.936	.337
E#C RACE	20.338	1	20.338	.936	.337
Explained	36.324	3	12.108	.557	.645
Residual	1325.430	61	21.728		
Total	1361.754	64	21.277		

* * * A N A L Y S I S O F V A R I A N C E * * *

F44 PERIPHERAL, SELF, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	21.953	2	10.976	1.791	.175
E#C	20.962	1	20.962	3.421	.069
RACE	1.643	1	1.643	.268	.606
2-way Interactions	4.681	1	4.681	.764	.386
E#C RACE	4.681	1	4.681	.764	.386
Explained	26.634	3	8.878	1.449	.237
Residual	373.766	61	6.127		
Total	400.400	64	6.256		

* * * A N A L Y S I S O F V A R I A N C E * * *

F45 CENTRAL, SELF, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	36.175	2	18.088	1.229	.300
E#C	27.488	1	27.488	1.867	.177
RACE	6.819	1	6.819	.463	.499
2-way Interactions	5.505	1	5.505	.374	.543
E#C RACE	5.505	1	5.505	.374	.543
Explained	41.680	3	13.893	.944	.425
Residual	898.074	61	14.723		
Total	939.754	64	14.684		

* * * A N A L Y S I S O F V A R I A N C E * * *

F46 POS. ATTIT., SELF, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	10.533	2	5.267	.598	.553
E#C	6.571	1	6.571	.747	.391
RACE	3.331	1	3.331	.378	.541
2-way Interactions	4.158	1	4.158	.472	.495
E#C RACE	4.158	1	4.158	.472	.495
Explained	14.691	3	4.897	.556	.646
Residual	536.909	61	8.802		
Total	551.600	64	8.619		

* * * A N A L Y S I S O F V A R I A N C E * * *

F47 NEG. ATTIT., SELF, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	14.200	2	7.100	3.448	.039
E#C	12.906	1	12.906	6.268	.015
RACE	1.196	1	1.196	.581	.449
2-way Interactions	2.629	1	2.629	1.277	.263
E#C RACE	2.629	1	2.629	1.277	.263
Explained	16.829	3	5.610	2.724	.053
Residual	117.367	57	2.059		
Total	134.197	60	2.237		

* * * A N A L Y S I S O F V A R I A N C E * * *

F48 NEUTRAL, SELF, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	46.195	2	23.097	3.367	.041
E#C	39.954	1	39.954	5.824	.019
RACE	5.857	1	5.857	.854	.359
2-way Interactions	.002	1	.002	.000	.985
E#C RACE	.002	1	.002	.000	.985
Explained	46.197	3	15.399	2.245	.093
Residual	391.049	57	6.861		
Total	437.246	60	7.287		

* * * A N A L Y S I S O F V A R I A N C E * * *

F49 FLUENCY, BOY, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	1.019	2	.510	.071	.931
E#C	.037	1	.037	.005	.943
RACE	.977	1	.977	.136	.713
2-way Interactions	10.611	1	10.611	1.482	.229
E#C RACE	10.611	1	10.611	1.482	.229
Explained	11.630	3	3.877	.541	.656
Residual	408.173	57	7.161		
Total	419.803	60	6.997		

* * * A N A L Y S I S O F V A R I A N C E * * *

F50 PERIPHERAL, BOY, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	16.087	2	8.043	1.673	.197
E#C	15.807	1	15.807	3.289	.075
RACE	.334	1	.334	.069	.793
2-way Interactions	2.887	1	2.887	.601	.442
E#C RACE	2.887	1	2.887	.601	.442
Explained	18.974	3	6.325	1.316	.278
Residual	273.977	57	4.807		
Total	292.951	60	4.883		

* * * A N A L Y S I S O F V A R I A N C E * * *

F51 CENTRAL, BOY, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	16.926	2	8.463	1.335	.271
E#C	16.575	1	16.575	2.615	.111
RACE	.294	1	.294	.046	.830
2-way Interactions	2.130	1	2.130	.336	.564
E#C RACE	2.130	1	2.130	.336	.564
Explained	19.056	3	6.352	1.002	.399
Residual	361.272	57	6.338		
Total	380.328	60	6.339		

* * * A N A L Y S I S O F V A R I A N C E * * *

F52 POS. ATTIT., BOY, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	45.767	2	22.883	3.865	.027
E#C	36.010	1	36.010	6.082	.017
RACE	9.332	1	9.332	1.576	.214
2-way Interactions	1.298	1	1.298	.219	.641
E#C RACE	1.298	1	1.298	.219	.641
Explained	47.065	3	15.688	2.650	.057
Residual	337.493	57	5.921		
Total	384.557	60	6.409		

* * * A N A L Y S I S O F V A R I A N C E * * *

F53 NEG. ATTIT., BOY, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	14.632	2	7.316	1.416	.251
E#C	10.771	1	10.771	2.085	.154
RACE	3.714	1	3.714	.719	.400
2-way Interactions	4.686	1	4.686	.907	.345
E#C RACE	4.686	1	4.686	.907	.345
Explained	19.318	3	6.439	1.247	.301
Residual	294.452	57	5.166		
Total	313.770	60	5.230		

* * * A N A L Y S I S O F V A R I A N C E * * *

F54 NEUTRAL, BOY, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	2.951	2	1.476	.338	.715
E#C	.525	1	.525	.120	.730
RACE	2.400	1	2.400	.550	.461
2-way Interactions	2.650	1	2.650	.607	.439
E#C RACE	2.650	1	2.650	.607	.439
Explained	5.601	3	1.867	.428	.734
Residual	248.760	57	4.364		
Total	254.361	60	4.239		

* * * A N A L Y S I S O F V A R I A N C E * * *

F55 FLUENCY, GIRL, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	32.699	2	16.350	2.170	.124
E#C	8.775	1	8.775	1.165	.285
RACE	23.590	1	23.590	3.131	.082
2-way Interactions	5.452	1	5.452	.724	.399
E#C RACE	5.452	1	5.452	.724	.399
Explained	38.151	3	12.717	1.688	.180
Residual	429.488	57	7.535		
Total	467.639	60	7.794		

* * * A N A L Y S I S O F V A R I A N C E * * *

F56 PERIPHERAL, GIRL, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	10.688	2	5.344	1.446	.244
E#C	5.180	1	5.180	1.401	.241
RACE	5.386	1	5.386	1.457	.232
2-way Interactions	.066	1	.066	.018	.894
E#C RACE	.066	1	.066	.018	.894
Explained	10.755	3	3.585	.970	.413
Residual	210.688	57	3.696		
Total	221.443	60	3.691		

* * * A N A L Y S I S O F V A R I A N C E * * *

F57 CENTRAL, GIRL, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	7.058	2	3.529	.557	.576
E#C	.678	1	.678	.107	.745
RACE	6.376	1	6.376	1.006	.320
2-way Interactions	4.973	1	4.973	.784	.380
E#C RACE	4.973	1	4.973	.784	.380
Explained	12.031	3	4.010	.633	.597
Residual	361.379	57	6.340		
Total	373.410	60	6.223		

* * * A N A L Y S I S O F V A R I A N C E * * *

F58 POS. ATTIT., GIRL, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	10.609	2	5.304	.854	.431
E#C	6.968	1	6.968	1.122	.294
RACE	3.630	1	3.630	.584	.448
2-way Interactions	.009	1	.009	.001	.969
E#C RACE	.009	1	.009	.001	.969
Explained	10.618	3	3.539	.570	.637
Residual	354.071	57	6.212		
Total	364.689	60	6.078		

* * * A N A L Y S I S O F V A R I A N C E * * *

F59 NEG. ATTIT., GIRL, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	11.028	2	5.514	2.049	.138
E#C	4.541	1	4.541	1.688	.199
RACE	6.475	1	6.475	2.407	.126
2-way Interactions	1.942	1	1.942	.722	.399
E#C RACE	1.942	1	1.942	.722	.399
Explained	12.970	3	4.323	1.607	.198
Residual	153.358	57	2.690		
Total	166.328	60	2.772		

* * * A N A L Y S I S O F V A R I A N C E * * *

F60 NEUTRAL, GIRL, CHANGE
BY E#C
RACE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	3.498	2	1.749	.362	.698
E#C	3.379	1	3.379	.699	.407
RACE	.120	1	.120	.025	.875
2-way Interactions	1.800	1	1.800	.373	.544
E#C RACE	1.800	1	1.800	.373	.544
Explained	5.298	3	1.766	.365	.778
Residual	275.489	57	4.833		
Total	280.787	60	4.680		

* * * A N A L Y S I S O F V A R I A N C E * * *

PH#P PIERS-HARRIS PRETEST
BY SESSION
RACE
E#C

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	799.032	4	199.758	3.326	.015
SESSION	96.017	2	48.009	.799	.454
RACE	499.005	1	499.005	8.308	.005
E#C	129.151	1	129.151	2.150	.147
2-way Interactions	58.298	5	11.660	.194	.964
SESSION RACE	6.646	2	3.323	.055	.946
SESSION E#C	56.117	2	28.059	.467	.629
RACE E#C	2.923	1	2.923	.049	.826
3-way Interactions	214.729	2	107.364	1.788	.175
SESSION RACE E#C	214.729	2	107.364	1.788	.175
Explained	1072.058	11	97.460	1.623	.112
Residual	4024.119	67	60.061		
Total	5096.177	78	65.336		

84 Cases were processed. 5 Cases (6.0 PCT) were missing.

F1 FLUENCY, SELF-DESCR., FIRST

BY SESSION
RACE
E#C

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	350.908	4	87.727	5.421	.001
SESSION	128.847	2	64.423	3.981	.023
RACE	147.745	1	147.745	9.130	.004
E#C	16.598	1	16.598	1.026	.315
2-way Interactions	96.096	5	19.219	1.188	.325
SESSION RACE	67.545	2	33.772	2.087	.132
SESSION E#C	14.034	2	7.017	.434	.650
RACE E#C	7.480	1	7.480	.462	.499
3-way Interactions	21.177	2	10.589	.654	.523
SESSION RACE E#C	21.177	2	10.589	.654	.523
Explained	468.182	11	42.562	2.630	.007
Residual	1084.198	67	16.182		
Total	1552.380	78	19.902		

F2 PERIPH., SELF-DESCR., FIRST

BY SESSION
RACE
E#C

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	9.717	4	2.429	.595	.667
SESSION	3.860	2	1.930	.473	.625
RACE	.612	1	.612	.150	.700
E#C	3.618	1	3.618	.887	.350
2-way Interactions	49.105	5	9.821	2.407	.046
SESSION RACE	38.013	2	19.007	4.658	.013
SESSION E#C	8.005	2	4.002	.981	.380
RACE E#C	8.345	1	8.345	2.045	.157
3-way Interactions	5.683	2	2.841	.696	.502
SESSION RACE E#C	5.683	2	2.841	.696	.502
Explained	64.505	11	5.864	1.437	.177
Residual	273.394	67	4.081		
Total	337.899	78	4.332		

F3 CENTRAL, SELF-DESCR., FIRST

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	268.083	4	67.021	4.806	.002
SESSION	91.959	2	45.980	3.297	.043
RACE	129.337	1	129.337	9.275	.003
E#C	4.717	1	4.717	.338	.563
2-way Interactions	68.645	5	13.729	.985	.434
SESSION RACE	4.350	2	2.175	.156	.856
SESSION E#C	26.515	2	13.257	.951	.392
RACE E#C	31.625	1	31.625	2.268	.137
3-way Interactions	10.103	2	5.051	.362	.697
SESSION RACE E#C	10.103	2	5.051	.362	.697
Explained	346.830	11	31.530	2.261	.021
Residual	934.258	67	13.944		
Total	1281.089	78	16.424		

F4 POS. ATTIT., SELF-DESCR., FIRST
BY SESSION
RACE
E#C

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	99.878	4	24.970	3.360	.015
SESSION	39.542	2	19.771	2.660	.078
RACE	31.815	1	31.815	4.281	.043
E#C	6.593	1	6.593	.887	.350
2-way Interactions	43.403	5	8.681	1.168	.335
SESSION RACE	3.342	2	1.671	.225	.799
SESSION E#C	24.771	2	12.386	1.667	.197
RACE E#C	15.374	1	15.374	2.069	.155
3-way Interactions	18.245	2	9.122	1.228	.300
SESSION RACE E#C	18.245	2	9.122	1.228	.300
Explained	161.525	11	14.684	1.976	.046
Residual	460.758	62	7.432		
Total	622.284	73	8.524		

F5 NEG. ATTIT., SELF-DESCR., FIRST
BY SESSION
RACE
E#C

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	12.923	4	3.231	1.893	.123
SESSION	7.368	2	3.684	2.158	.124
RACE	2.111	1	2.111	1.237	.270
E#C	2.391	1	2.391	1.401	.241
2-way Interactions	2.184	5	.437	.256	.935
SESSION RACE	.482	2	.241	.141	.869
SESSION E#C	1.525	2	.763	.447	.642
RACE E#C	.000	1	.000	.000	.991
3-way Interactions	.458	2	.229	.134	.875
SESSION RACE E#C	.458	2	.229	.134	.875
Explained	15.565	11	1.415	.829	.612
Residual	105.840	62	1.707		
Total	121.405	73	1.663		

F21 CENTRAL, BOY, FIRST
BY SESSION
RACE
E#C

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	62.553	4	15.638	2.538	.050
SESSION	9.059	2	4.529	.735	.484
RACE	44.134	1	44.134	7.161	.010
E#C	2.671	1	2.671	.433	.513
2-way Interactions	57.977	5	11.595	1.882	.112
SESSION RACE	22.809	2	11.405	1.851	.166
SESSION E#C	9.253	2	4.626	.751	.477
RACE E#C	14.409	1	14.409	2.338	.132
3-way Interactions	1.960	2	.980	.159	.853
SESSION RACE E#C	1.960	2	.980	.159	.853
Explained	122.490	11	11.135	1.807	.074
Residual	351.279	57	6.163		
Total	473.768	68	6.967		

APPENDIX E.

SUMMARIES OF MEANS

Summaries of PH#P PIERS-HARRIS PRETEST
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			61.8889	8.0047	81
E#C	1	EXPERIMENTAL	63.3488	7.5368	43
RACE	1	WHITE SCHOOLS	60.7619	8.7744	21
SESSION	1	FIRST SESSION	59.2000	12.8141	5
SESSION	2	SECOND SESSION	62.2500	9.1768	8
SESSION	3	THIRD SESSION	60.2500	6.1120	8
RACE	2	BLACK SCHOOLS	65.8182	5.2157	22
SESSION	1	FIRST SESSION	68.2500	4.7434	8
SESSION	2	SECOND SESSION	63.0000	5.1824	8
SESSION	3	THIRD SESSION	66.3333	4.7610	6

Criterion Variable PH#P

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	60.2368	8.2934	38
RACE	1	WHITE SCHOOLS	58.0455	9.8777	22
SESSION	1	FIRST SESSION	60.5714	8.9602	7
SESSION	2	SECOND SESSION	54.0000	10.7038	8
SESSION	3	THIRD SESSION	60.1429	9.6511	7
RACE	2	BLACK SCHOOLS	63.2500	4.0415	16
SESSION	1	FIRST SESSION	62.7500	3.9911	8
SESSION	2	SECOND SESSION	63.6000	5.0794	5
SESSION	3	THIRD SESSION	64.0000	3.6056	3

Total Cases = 84
Missing Cases = 3 OR 3.6 PCT.

Summaries of F1 FLUENCY, SELF-DESCR., FIRST
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			8.9114	4.4612	79
E#C	1	EXPERIMENTAL	9.3810	5.1417	42
RACE	1	WHITE SCHOOLS	11.3810	6.1113	21
SESSION	1	FIRST SESSION	6.4000	1.5166	5
SESSION	2	SECOND SESSION	13.6250	7.8729	8
SESSION	3	THIRD SESSION	12.2500	4.3671	8
RACE	2	BLACK SCHOOLS	7.3810	2.9065	21
SESSION	1	FIRST SESSION	6.7143	3.5923	7
SESSION	2	SECOND SESSION	7.2500	2.4928	8
SESSION	3	THIRD SESSION	8.3333	2.8048	6

Criterion Variable F1

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	8.3784	3.5304	37
RACE	1	WHITE SCHOOLS	9.3182	3.9927	22
SESSION	1	FIRST SESSION	7.1429	1.7728	7
SESSION	2	SECOND SESSION	10.0000	4.5040	8
SESSION	3	THIRD SESSION	10.7143	4.5356	7
RACE	2	BLACK SCHOOLS	7.0000	2.1712	15
SESSION	1	FIRST SESSION	6.6250	2.6693	8
SESSION	2	SECOND SESSION	7.6000	1.6733	5
SESSION	3	THIRD SESSION	7.0000	1.4142	2

Summaries of F2 PERIPH., SELF-DESCR., FIRST
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			3.2278	2.0814	79
E#C	1	EXPERIMENTAL	3.4524	2.1550	42
RACE	1	WHITE SCHOOLS	3.3810	2.2908	21
SESSION	1	FIRST SESSION	1.4000	2.1909	5
SESSION	2	SECOND SESSION	3.7500	2.0529	8
SESSION	3	THIRD SESSION	4.2500	2.0529	8
RACE	2	BLACK SCHOOLS	3.5238	2.0644	21
SESSION	1	FIRST SESSION	4.5714	1.7182	7
SESSION	2	SECOND SESSION	2.5000	2.0000	8
SESSION	3	THIRD SESSION	3.6667	2.1602	6

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	2.9730	1.9929	37
RACE	1	WHITE SCHOOLS	3.2727	2.1421	22
SESSION	1	FIRST SESSION	2.4286	2.5071	7
SESSION	2	SECOND SESSION	4.1250	2.1671	8
SESSION	3	THIRD SESSION	3.1429	1.5736	7
RACE	2	BLACK SCHOOLS	2.5333	1.7265	15
SESSION	1	FIRST SESSION	2.7500	1.8323	8
SESSION	2	SECOND SESSION	2.4000	2.0736	5
SESSION	3	THIRD SESSION	2.0000	.0000	2

Summaries of F3 CENTRAL, SELF-DESCR., FIRST
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			5.6835	4.0527	79
E#C	1	EXPERIMENTAL	5.9286	4.4688	42
RACE	1	WHITE SCHOOLS	8.0000	5.1284	21
SESSION	1	FIRST SESSION	5.0000	2.4495	5
SESSION	2	SECOND SESSION	9.8750	7.2198	8
SESSION	3	THIRD SESSION	8.0000	3.0237	8
RACE	2	BLACK SCHOOLS	3.8571	2.3725	21
SESSION	1	FIRST SESSION	2.1429	2.3401	7
SESSION	2	SECOND SESSION	4.7500	2.3146	8
SESSION	3	THIRD SESSION	4.6667	1.5055	6

Criterion Variable F3

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	5.4054	3.5626	37
RACE	1	WHITE SCHOOLS	6.0455	3.9458	22
SESSION	1	FIRST SESSION	4.7143	2.4976	7
SESSION	2	SECOND SESSION	5.8750	5.1669	8
SESSION	3	THIRD SESSION	7.5714	3.5051	7
RACE	2	BLACK SCHOOLS	4.4667	2.7740	15
SESSION	1	FIRST SESSION	3.8750	3.4821	8
SESSION	2	SECOND SESSION	5.2000	1.9235	5
SESSION	3	THIRD SESSION	5.0000	1.4142	2

Summaries of F4 POS. ATTIT., SELF-DESCR., FIRST
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			4.5696	2.9075	79
E#C	1	EXPERIMENTAL	4.8810	3.1869	42
RACE	1	WHITE SCHOOLS	6.0476	3.5139	21
SESSION	1	FIRST SESSION	4.8000	2.0494	5
SESSION	2	SECOND SESSION	7.1250	4.8237	8
SESSION	3	THIRD SESSION	5.7500	2.6592	8
RACE	2	BLACK SCHOOLS	3.7143	2.3694	21
SESSION	1	FIRST SESSION	2.0000	1.6330	7
SESSION	2	SECOND SESSION	4.1250	2.4165	8
SESSION	3	THIRD SESSION	5.1667	2.0412	6

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	4.2162	2.5510	37
RACE	1	WHITE SCHOOLS	4.5455	2.9557	22
SESSION	1	FIRST SESSION	4.2857	2.4300	7
SESSION	2	SECOND SESSION	3.3750	3.0677	8
SESSION	3	THIRD SESSION	6.1429	2.9681	7
RACE	2	BLACK SCHOOLS	3.7333	1.7915	15
SESSION	1	FIRST SESSION	3.2500	1.6690	8
SESSION	2	SECOND SESSION	4.2000	2.2804	5
SESSION	3	THIRD SESSION	4.5000	.7071	2

Summaries of F5 NEG. ATTIT., SELF-DESCR., FIRST
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			.5949	1.2559	79
E#C	1	EXPERIMENTAL	.4524	.7392	42
RACE	1	WHITE SCHOOLS	.6190	.8646	21
SESSION	1	FIRST SESSION	.4000	.5477	5
SESSION	2	SECOND SESSION	.8750	1.1260	8
SESSION	3	THIRD SESSION	.5000	.7559	8
RACE	2	BLACK SCHOOLS	.2857	.5606	21
SESSION	1	FIRST SESSION	.1429	.3780	7
SESSION	2	SECOND SESSION	.5000	.7559	8
SESSION	3	THIRD SESSION	.1667	.4082	6

Criterion Variable F5

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	.7568	1.6567	37
RACE	1	WHITE SCHOOLS	.8636	1.9832	22
SESSION	1	FIRST SESSION	.2857	.7559	7
SESSION	2	SECOND SESSION	1.7500	3.0589	8
SESSION	3	THIRD SESSION	.4286	.7868	7
RACE	2	BLACK SCHOOLS	.6000	1.0556	15
SESSION	1	FIRST SESSION	.3750	1.0607	8
SESSION	2	SECOND SESSION	1.0000	1.2247	5
SESSION	3	THIRD SESSION	.5000	.7071	2

Summaries of F6 NEUTRAL, SELF-DESCR., FIRST
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			3.7342	2.5304	79
E#C	1	EXPERIMENTAL	4.0238	2.9007	42
RACE	1	WHITE SCHOOLS	4.6667	3.5684	21
SESSION	1	FIRST SESSION	1.2000	1.7889	5
SESSION	2	SECOND SESSION	5.6250	3.9619	8
SESSION	3	THIRD SESSION	5.8750	2.7484	8
RACE	2	BLACK SCHOOLS	3.3810	1.9099	21
SESSION	1	FIRST SESSION	4.5714	1.9024	7
SESSION	2	SECOND SESSION	2.6250	1.9226	8
SESSION	3	THIRD SESSION	3.0000	1.4142	6

Criterion Variable F6

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	3.4054	2.0202	37
RACE	1	WHITE SCHOOLS	3.9091	2.2019	22
SESSION	1	FIRST SESSION	2.5714	2.5071	7
SESSION	2	SECOND SESSION	4.8750	2.2321	8
SESSION	3	THIRD SESSION	4.1429	1.2150	7
RACE	2	BLACK SCHOOLS	2.6667	1.4960	15
SESSION	1	FIRST SESSION	3.0000	1.3093	8
SESSION	2	SECOND SESSION	2.4000	2.0736	5
SESSION	3	THIRD SESSION	2.0000	.0000	2

Summaries of F21 CENTRAL, BOY, FIRST
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			4.1622	2.6225	74
E#C	1	EXPERIMENTAL	4.1190	2.6614	42
RACE	1	WHITE SCHOOLS	5.3333	2.9040	21
SESSION	1	FIRST SESSION	3.8000	2.1679	5
SESSION	2	SECOND SESSION	6.8750	3.7583	8
SESSION	3	THIRD SESSION	4.7500	1.5811	8
RACE	2	BLACK SCHOOLS	2.9048	1.7293	21
SESSION	1	FIRST SESSION	2.2857	.9512	7
SESSION	2	SECOND SESSION	3.0000	1.9272	8

SESSION	3	THIRD SESSION	3.5000	2.1679	6

Criterion Variable F21

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	4.2188	2.6118	32
RACE	1	WHITE SCHOOLS	4.1765	3.0870	17
SESSION	1	FIRST SESSION	1.7500	1.2583	4
SESSION	2	SECOND SESSION	5.3750	2.6693	8
SESSION	3	THIRD SESSION	4.2000	3.9623	5
RACE	2	BLACK SCHOOLS	4.2667	2.0517	15
SESSION	1	FIRST SESSION	4.8750	2.0310	8
SESSION	2	SECOND SESSION	3.4000	1.9494	5
SESSION	3	THIRD SESSION	4.0000	2.8284	2

Summaries of F43 FLUENCY, SELF, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			-.1385	4.6127	65
E#C	1	EXPERIMENTAL	-.2308	5.2489	39
RACE	1	WHITE SCHOOLS	-.2000	6.8256	20
SESSION	1	FIRST SESSION	-2.6000	3.9115	5
SESSION	2	SECOND SESSION	.4286	9.3248	7
SESSION	3	THIRD SESSION	.7500	6.1354	8
RACE	2	BLACK SCHOOLS	-.2632	2.9971	19
SESSION	1	FIRST SESSION	-.7143	2.8115	7
SESSION	2	SECOND SESSION	-.8750	2.3566	8
SESSION	3	THIRD SESSION	1.7500	4.2720	4

Criterion Variable F43

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	.0000	3.5440	26
RACE	1	WHITE SCHOOLS	1.0000	3.5051	15
SESSION	1	FIRST SESSION	1.4286	2.1492	7
SESSION	2	SECOND SESSION	-.4000	3.7148	5
SESSION	3	THIRD SESSION	2.3333	6.0277	3
RACE	2	BLACK SCHOOLS	-1.3636	3.2641	11
SESSION	1	FIRST SESSION	-2.8571	2.7343	7
SESSION	2	SECOND SESSION	1.2500	2.5000	4

Total Cases = 84
Missing Cases = 19 OR 22.6 PCT.

Summaries of F44 PERIPHERAL, SELF, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			.8000	2.5012	65

E#C	1	EXPERIMENTAL	1.2564	2.5414	39
RACE	1	WHITE SCHOOLS	1.2000	3.0366	20
SESSION	1	FIRST SESSION	1.0000	2.2361	5
SESSION	2	SECOND SESSION	-.2857	3.1472	7
SESSION	3	THIRD SESSION	2.6250	3.0208	8
RACE	2	BLACK SCHOOLS	1.3158	1.9735	19
SESSION	1	FIRST SESSION	1.5714	1.3973	7
SESSION	2	SECOND SESSION	1.0000	2.0702	8
SESSION	3	THIRD SESSION	1.5000	3.0000	4

Criterion Variable F44

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	.1154	2.3208	26
RACE	1	WHITE SCHOOLS	.5333	2.1336	15
SESSION	1	FIRST SESSION	1.0000	2.0817	7
SESSION	2	SECOND SESSION	.2000	1.4832	5
SESSION	3	THIRD SESSION	.0000	3.6056	3
RACE	2	BLACK SCHOOLS	-.4545	2.5442	11
SESSION	1	FIRST SESSION	-1.5714	1.9881	7
SESSION	2	SECOND SESSION	1.5000	2.3805	4

Total Cases = 84
Missing Cases = 19 OR 22.6 PCT.

Summaries of F45 CENTRAL, SELF, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			-.9385	3.8319	65
E#C	1	EXPERIMENTAL	-1.4872	4.2604	39
RACE	1	WHITE SCHOOLS	-1.4000	5.4811	20
SESSION	1	FIRST SESSION	-3.6000	4.6152	5
SESSION	2	SECOND SESSION	.7143	6.6512	7
SESSION	3	THIRD SESSION	-1.8750	4.8237	8
RACE	2	BLACK SCHOOLS	-1.5789	2.5672	19
SESSION	1	FIRST SESSION	-2.2857	2.5635	7
SESSION	2	SECOND SESSION	-1.8750	2.2321	8
SESSION	3	THIRD SESSION	.2500	2.9861	4

Criterion Variable F45

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	-.1154	2.9709	26
RACE	1	WHITE SCHOOLS	.4667	3.0675	15
SESSION	1	FIRST SESSION	.4286	3.1015	7
SESSION	2	SECOND SESSION	-.6000	3.3615	5
SESSION	3	THIRD SESSION	2.3333	2.5166	3
RACE	2	BLACK SCHOOLS	-.9091	2.7732	11
SESSION	1	FIRST SESSION	-1.2857	2.8702	7
SESSION	2	SECOND SESSION	-.2500	2.8723	4

Summaries of F46 POS. ATTIT., SELF, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			-.6000	2.9358	65
E#C	1	EXPERIMENTAL	-.8718	3.1638	39
RACE	1	WHITE SCHOOLS	-.8500	3.6746	20
SESSION	1	FIRST SESSION	-1.4000	1.6733	5
SESSION	2	SECOND SESSION	.5714	5.0285	7
SESSION	3	THIRD SESSION	-1.7500	3.1960	8
RACE	2	BLACK SCHOOLS	-.8947	2.6224	19
SESSION	1	FIRST SESSION	-1.5714	2.4398	7
SESSION	2	SECOND SESSION	-1.1250	2.8504	8
SESSION	3	THIRD SESSION	.7500	2.3629	4

Criterion Variable F46

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	-.1923	2.5616	26
RACE	1	WHITE SCHOOLS	.2667	2.8900	15
SESSION	1	FIRST SESSION	.4286	2.1492	7
SESSION	2	SECOND SESSION	-1.2000	3.7014	5
SESSION	3	THIRD SESSION	2.3333	2.3094	3
RACE	2	BLACK SCHOOLS	-.8182	1.9909	11
SESSION	1	FIRST SESSION	-1.1429	2.1931	7
SESSION	2	SECOND SESSION	-.2500	1.7078	4

Total Cases = 84
Missing Cases = 19 OR 22.6 PCT.

Summaries of F47 NEG. ATTIT., SELF, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			-.1538	1.4709	65
E#C	1	EXPERIMENTAL	-.4615	1.6034	39
RACE	1	WHITE SCHOOLS	-.7500	1.9967	20
SESSION	1	FIRST SESSION	-1.0000	2.8284	5
SESSION	2	SECOND SESSION	-.4286	1.2724	7
SESSION	3	THIRD SESSION	-.8750	2.1671	8
RACE	2	BLACK SCHOOLS	-.1579	1.0145	19
SESSION	1	FIRST SESSION	-.2857	.4880	7
SESSION	2	SECOND SESSION	-.1250	1.5526	8
SESSION	3	THIRD SESSION	.0000	.0000	4

Criterion Variable F47

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	.3077	1.1232	26
RACE	1	WHITE SCHOOLS	.2667	1.3870	15
SESSION	1	FIRST SESSION	.0000	.5774	7
SESSION	2	SECOND SESSION	1.0000	1.7321	5
SESSION	3	THIRD SESSION	-.3333	2.0817	3
RACE	2	BLACK SCHOOLS	.3636	.6742	11
SESSION	1	FIRST SESSION	.2857	.7559	7
SESSION	2	SECOND SESSION	.5000	.5774	4

Summaries of F48 NEUTRAL, SELF, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			.6154	2.7082	65
E#C	1	EXPERIMENTAL	1.1026	2.8078	39
RACE	1	WHITE SCHOOLS	1.4000	3.5004	20
SESSION	1	FIRST SESSION	-.2000	1.0954	5
SESSION	2	SECOND SESSION	.2857	3.9881	7
SESSION	3	THIRD SESSION	3.3750	3.3780	8
RACE	2	BLACK SCHOOLS	.7895	1.8732	19
SESSION	1	FIRST SESSION	1.1429	1.9518	7
SESSION	2	SECOND SESSION	.3750	1.5980	8
SESSION	3	THIRD SESSION	1.0000	2.5820	4

Criterion Variable F48

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	-.1154	2.4220	26
RACE	1	WHITE SCHOOLS	.4667	2.1996	15
SESSION	1	FIRST SESSION	1.0000	1.4142	7
SESSION	2	SECOND SESSION	-.2000	1.6432	5
SESSION	3	THIRD SESSION	.3333	4.5092	3
RACE	2	BLACK SCHOOLS	-.9091	2.5867	11
SESSION	1	FIRST SESSION	-2.0000	2.2361	7
SESSION	2	SECOND SESSION	1.0000	2.1602	4

Summaries of F49 FLUENCY, BOY, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			.6970	2.7059	66
E#C	1	EXPERIMENTAL	.6905	2.5035	42
RACE	1	WHITE SCHOOLS	1.1429	2.9032	21
SESSION	1	FIRST SESSION	-.2000	2.1679	5
SESSION	2	SECOND SESSION	2.7500	3.6547	8
SESSION	3	THIRD SESSION	.3750	1.7678	8
RACE	2	BLACK SCHOOLS	.2381	1.9976	21
SESSION	1	FIRST SESSION	-.1429	1.7728	7
SESSION	2	SECOND SESSION	.8750	1.7269	8
SESSION	3	THIRD SESSION	-.1667	2.6394	6

Criterion Variable F49

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	.7083	3.0854	24
RACE	1	WHITE SCHOOLS	.0769	3.5228	13
SESSION	1	FIRST SESSION	-.5000	1.2910	4
SESSION	2	SECOND SESSION	1.1429	3.1848	7
SESSION	3	THIRD SESSION	-2.5000	7.7782	2
RACE	2	BLACK SCHOOLS	1.4545	2.4234	11
SESSION	1	FIRST SESSION	1.4286	3.0472	7
SESSION	2	SECOND SESSION	1.5000	1.0000	4

Summaries of F50 PERIPHERAL, BOY, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			1.0455	2.1869	66
E#C	1	EXPERIMENTAL	1.3571	2.1279	42
RACE	1	WHITE SCHOOLS	1.5238	2.0154	21
SESSION	1	FIRST SESSION	1.2000	3.5637	5
SESSION	2	SECOND SESSION	1.7500	1.1650	8
SESSION	3	THIRD SESSION	1.5000	1.6903	8
RACE	2	BLACK SCHOOLS	1.1905	2.2720	21
SESSION	1	FIRST SESSION	1.5714	1.5119	7
SESSION	2	SECOND SESSION	1.1250	1.8851	8
SESSION	3	THIRD SESSION	.8333	3.5449	6

Criterion Variable F50

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	.5000	2.2263	24
RACE	1	WHITE SCHOOLS	.2308	2.1662	13
SESSION	1	FIRST SESSION	1.2500	2.5000	4
SESSION	2	SECOND SESSION	.2857	1.6036	7
SESSION	3	THIRD SESSION	-2.0000	2.8284	2
RACE	2	BLACK SCHOOLS	.8182	2.3587	11
SESSION	1	FIRST SESSION	.4286	2.8785	7
SESSION	2	SECOND SESSION	1.5000	1.0000	4

Summaries of F51 CENTRAL, BOY, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			-.3333	2.6331	66
E#C	1	EXPERIMENTAL	-.6429	2.7481	42
RACE	1	WHITE SCHOOLS	-.3810	3.0574	21
SESSION	1	FIRST SESSION	-1.4000	2.1909	5
SESSION	2	SECOND SESSION	1.0000	4.3095	8
SESSION	3	THIRD SESSION	-1.1250	1.3562	8
RACE	2	BLACK SCHOOLS	-.9048	2.4475	21
SESSION	1	FIRST SESSION	-1.7143	2.1381	7
SESSION	2	SECOND SESSION	-.2500	2.6592	8
SESSION	3	THIRD SESSION	-.8333	2.6394	6

Criterion Variable F51

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	.2083	2.3770	24
RACE	1	WHITE SCHOOLS	-.1538	2.7942	13
SESSION	1	FIRST SESSION	-1.7500	2.5000	4
SESSION	2	SECOND SESSION	.8571	2.3401	7
SESSION	3	THIRD SESSION	-.5000	4.9497	2
RACE	2	BLACK SCHOOLS	.6364	1.8040	11
SESSION	1	FIRST SESSION	1.0000	1.7321	7
SESSION	2	SECOND SESSION	.0000	2.0000	4

Summaries of F52 POS. ATTIT., BOY, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			-.6061	2.4861	66
E#C	1	EXPERIMENTAL	-1.0952	2.6486	42
RACE	1	WHITE SCHOOLS	-1.4286	3.3402	21
SESSION	1	FIRST SESSION	-1.8000	2.7749	5
SESSION	2	SECOND SESSION	-.1250	3.7961	8
SESSION	3	THIRD SESSION	-2.5000	3.1168	8
RACE	2	BLACK SCHOOLS	-.7619	1.7293	21
SESSION	1	FIRST SESSION	-1.7143	1.7995	7
SESSION	2	SECOND SESSION	-.1250	1.3562	8
SESSION	3	THIRD SESSION	-.5000	1.8708	6

Criterion Variable F52

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	.2500	1.9393	24
RACE	1	WHITE SCHOOLS	-.3077	2.0970	13
SESSION	1	FIRST SESSION	-.7500	2.2174	4
SESSION	2	SECOND SESSION	-.1429	1.7728	7
SESSION	3	THIRD SESSION	.0000	4.2426	2
RACE	2	BLACK SCHOOLS	.9091	1.5783	11
SESSION	1	FIRST SESSION	1.1429	1.3452	7
SESSION	2	SECOND SESSION	.5000	2.0817	4

Summaries of F53 NEG. ATTIT., BOY, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			.6212	2.2448	66
E#C	1	EXPERIMENTAL	1.0000	2.6133	42
RACE	1	WHITE SCHOOLS	1.3810	3.5139	21
SESSION	1	FIRST SESSION	1.2000	2.4900	5
SESSION	2	SECOND SESSION	1.1250	3.2705	8
SESSION	3	THIRD SESSION	1.7500	4.5591	8
RACE	2	BLACK SCHOOLS	.6190	1.1609	21
SESSION	1	FIRST SESSION	.5714	.9759	7
SESSION	2	SECOND SESSION	.5000	1.4142	8
SESSION	3	THIRD SESSION	.8333	1.1690	6

Criterion Variable F53

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	-.0417	1.1602	24
RACE	1	WHITE SCHOOLS	-.2308	1.4806	13
SESSION	1	FIRST SESSION	-.7500	.9574	4
SESSION	2	SECOND SESSION	.0000	1.9149	7
SESSION	3	THIRD SESSION	.0000	.0000	2
RACE	2	BLACK SCHOOLS	.1818	.6030	11
SESSION	1	FIRST SESSION	.1429	.3780	7
SESSION	2	SECOND SESSION	.2500	.9574	4

Summaries of F54 NEUTRAL, BOY, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			.7727	2.1107	66
E#C	1	EXPERIMENTAL	.8810	1.8373	42
RACE	1	WHITE SCHOOLS	1.2381	2.2339	21
SESSION	1	FIRST SESSION	.6000	1.6733	5
SESSION	2	SECOND SESSION	1.7500	2.6592	8
SESSION	3	THIRD SESSION	1.1250	2.2321	8
RACE	2	BLACK SCHOOLS	.5238	1.2891	21
SESSION	1	FIRST SESSION	1.0000	1.7321	7
SESSION	2	SECOND SESSION	.5000	.7559	8
SESSION	3	THIRD SESSION	.0000	1.2649	6

Criterion Variable F54

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	.5833	2.5524	24
RACE	1	WHITE SCHOOLS	.7692	3.0592	13
SESSION	1	FIRST SESSION	1.0000	2.0000	4
SESSION	2	SECOND SESSION	1.5714	3.2071	7
SESSION	3	THIRD SESSION	-2.5000	3.5355	2
RACE	2	BLACK SCHOOLS	.3636	1.9117	11
SESSION	1	FIRST SESSION	.1429	2.1157	7
SESSION	2	SECOND SESSION	.7500	1.7078	4

Summaries of F55 FLUENCY, GIRL, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			.8226	2.7730	62
E#C	1	EXPERIMENTAL	1.0732	2.7874	41
RACE	1	WHITE SCHOOLS	1.4762	3.4003	21
SESSION	1	FIRST SESSION	2.2000	1.9235	5
SESSION	2	SECOND SESSION	2.5000	4.2762	8
SESSION	3	THIRD SESSION	.0000	2.9277	8
RACE	2	BLACK SCHOOLS	.6500	1.9541	20
SESSION	1	FIRST SESSION	.7143	1.7995	7
SESSION	2	SECOND SESSION	.2500	2.1876	8
SESSION	3	THIRD SESSION	1.2000	2.0494	5

Criterion Variable F55

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	.3333	2.7447	21
RACE	1	WHITE SCHOOLS	1.3636	3.1072	11
SESSION	1	FIRST SESSION	2.0000	.0000	1
SESSION	2	SECOND SESSION	1.2857	3.9461	7
SESSION	3	THIRD SESSION	1.3333	1.1547	3
RACE	2	BLACK SCHOOLS	-.8000	1.8135	10
SESSION	1	FIRST SESSION	-1.8333	1.1690	6
SESSION	2	SECOND SESSION	.7500	1.5000	4

Total Cases = 84
Missing Cases = 22 OR 26.2 PCT.

Summaries of F56 PERIPHERAL, GIRL, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			.7097	1.9281	62
E#C	1	EXPERIMENTAL	.8780	2.0999	41
RACE	1	WHITE SCHOOLS	1.1905	2.4621	21
SESSION	1	FIRST SESSION	3.0000	2.7386	5
SESSION	2	SECOND SESSION	.5000	2.9277	8
SESSION	3	THIRD SESSION	.7500	1.1650	8
RACE	2	BLACK SCHOOLS	.5500	1.6376	20
SESSION	1	FIRST SESSION	.7143	1.6036	7
SESSION	2	SECOND SESSION	.0000	1.6903	8
SESSION	3	THIRD SESSION	1.2000	1.6432	5

Criterion Variable F56

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	.3810	1.5322	21
RACE	1	WHITE SCHOOLS	.7273	1.7373	11
SESSION	1	FIRST SESSION	.0000	.0000	1
SESSION	2	SECOND SESSION	.7143	1.9760	7
SESSION	3	THIRD SESSION	1.0000	1.7321	3
RACE	2	BLACK SCHOOLS	.0000	1.2472	10
SESSION	1	FIRST SESSION	.0000	.8944	6
SESSION	2	SECOND SESSION	.0000	1.8257	4

Summaries of F57 CENTRAL, GIRL, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			.1129	2.4768	62
E#C	1	EXPERIMENTAL	.1951	2.3898	41
RACE	1	WHITE SCHOOLS	.2857	3.1487	21
SESSION	1	FIRST SESSION	-.8000	1.6432	5
SESSION	2	SECOND SESSION	2.0000	3.3806	8
SESSION	3	THIRD SESSION	-.7500	3.1510	8

RACE	2	BLACK SCHOOLS	.1000	1.2524	20
SESSION	1	FIRST SESSION	.0000	1.1547	7
SESSION	2	SECOND SESSION	.2500	1.3887	8
SESSION	3	THIRD SESSION	.0000	1.4142	5

Criterion Variable F57

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	-.0476	2.6921	21
RACE	1	WHITE SCHOOLS	.6364	3.2023	11
SESSION	1	FIRST SESSION	2.0000	.0000	1
SESSION	2	SECOND SESSION	.5714	3.9940	7
SESSION	3	THIRD SESSION	.3333	1.5275	3
RACE	2	BLACK SCHOOLS	-.8000	1.8738	10
SESSION	1	FIRST SESSION	-1.8333	1.4720	6
SESSION	2	SECOND SESSION	.7500	1.2583	4

Summaries of F58 POS. ATTIT., GIRL, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			-.2903	2.4454	62
E#C	1	EXPERIMENTAL	-.0488	2.3765	41
RACE	1	WHITE SCHOOLS	.1905	3.1562	21
SESSION	1	FIRST SESSION	-1.0000	2.1213	5
SESSION	2	SECOND SESSION	1.8750	1.5526	8
SESSION	3	THIRD SESSION	-.7500	4.2678	8
RACE	2	BLACK SCHOOLS	-.3000	1.1286	20
SESSION	1	FIRST SESSION	.0000	.8165	7
SESSION	2	SECOND SESSION	-.1250	1.4577	8
SESSION	3	THIRD SESSION	-1.0000	.7071	5

Criterion Variable F58

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	-.7619	2.5672	21
RACE	1	WHITE SCHOOLS	-.5455	2.3394	11
SESSION	1	FIRST SESSION	.0000	.0000	1
SESSION	2	SECOND SESSION	-1.0000	2.8868	7
SESSION	3	THIRD SESSION	.3333	.5774	3
RACE	2	BLACK SCHOOLS	-1.0000	2.9059	10
SESSION	1	FIRST SESSION	-2.1667	2.3166	6
SESSION	2	SECOND SESSION	.7500	3.0957	4

Summaries of F59 NEG. ATTIT., GIRL, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			.3710	1.6520	62
E#C	1	EXPERIMENTAL	.5610	1.5660	41
RACE	1	WHITE SCHOOLS	.7619	1.9469	21
SESSION	1	FIRST SESSION	1.6000	2.0736	5
SESSION	2	SECOND SESSION	.3750	2.3867	8
SESSION	3	THIRD SESSION	.6250	1.4079	8
RACE	2	BLACK SCHOOLS	.3500	1.0400	20
SESSION	1	FIRST SESSION	.1429	.6901	7
SESSION	2	SECOND SESSION	.2500	1.2817	8
SESSION	3	THIRD SESSION	.8000	1.0954	5

Criterion Variable F59

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	.0000	1.7889	21
RACE	1	WHITE SCHOOLS	.5455	1.4397	11
SESSION	1	FIRST SESSION	2.0000	.0000	1
SESSION	2	SECOND SESSION	.1429	1.3452	7
SESSION	3	THIRD SESSION	1.0000	1.7321	3
RACE	2	BLACK SCHOOLS	-.6000	2.0111	10
SESSION	1	FIRST SESSION	-1.0000	2.5298	6
SESSION	2	SECOND SESSION	.0000	.8165	4

Summaries of F60 NEUTRAL, GIRL, CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			.7581	2.1477	62
E#C	1	EXPERIMENTAL	.5854	2.0854	41
RACE	1	WHITE SCHOOLS	.5238	2.5420	21
SESSION	1	FIRST SESSION	1.6000	2.4083	5
SESSION	2	SECOND SESSION	.2500	3.3274	8
SESSION	3	THIRD SESSION	.1250	1.7269	8
RACE	2	BLACK SCHOOLS	.6500	1.5313	20
SESSION	1	FIRST SESSION	.5714	1.8127	7
SESSION	2	SECOND SESSION	.5000	1.1952	8
SESSION	3	THIRD SESSION	1.0000	1.8708	5

Criterion Variable F60

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	1.0952	2.2783	21
RACE	1	WHITE SCHOOLS	1.3636	2.2923	11
SESSION	1	FIRST SESSION	.0000	.0000	1
SESSION	2	SECOND SESSION	2.1429	2.5448	7
SESSION	3	THIRD SESSION	.0000	1.0000	3
RACE	2	BLACK SCHOOLS	.8000	2.3476	10
SESSION	1	FIRST SESSION	1.3333	2.4221	6
SESSION	2	SECOND SESSION	.0000	2.3094	4

Summaries of F61 PIERS-HARRIS CHANGE
By levels of E#C
RACE
SESSION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			-2.4429	3.7557	70
E#C	1	EXPERIMENTAL	-1.5952	3.1004	42
RACE	1	WHITE SCHOOLS	-1.9524	3.6807	21
SESSION	1	FIRST SESSION	.4000	2.5100	5
SESSION	2	SECOND SESSION	-3.3750	4.6885	8
SESSION	3	THIRD SESSION	-2.0000	2.6186	8
RACE	2	BLACK SCHOOLS	-1.2381	2.4270	21
SESSION	1	FIRST SESSION	-.7500	2.0529	8
SESSION	2	SECOND SESSION	-2.2857	3.0938	7
SESSION	3	THIRD SESSION	-.6667	1.9664	6

Criterion Variable F61

Variable	Value	Label	Mean	Std Dev	Cases
E#C	2	CONTROL	-3.7143	4.3193	28
RACE	1	WHITE SCHOOLS	-3.2941	4.9468	17
SESSION	1	FIRST SESSION	-3.8571	2.5448	7
SESSION	2	SECOND SESSION	-5.2857	5.3452	7
SESSION	3	THIRD SESSION	2.6667	4.7258	3
RACE	2	BLACK SCHOOLS	-4.3636	3.2333	11
SESSION	1	FIRST SESSION	-4.4286	3.4087	7
SESSION	2	SECOND SESSION	-4.2500	3.4034	4

Total Cases = 84
Missing Cases = 14 OR 16.7 PCT.

84 Cases were processed.
23 Cases (27.4 PCT) were missing.

APPENDIX F.

CORRELATION COEFFICIENTS

Correlations:	PH#P	F1	F2	F3	F4	F5
PH#P	1.0000	-.0978	.1217	-.1702	.0512	-.3446
	(0)	(79)	(79)	(79)	(79)	(79)
	P= .	P= .196	P= .143	P= .067	P= .327	P= .001
F1	-.0978	1.0000	.4206	.8848	.7561	.4122
	(79)	(0)	(79)	(79)	(79)	(79)
	P= .196	P= .	P= .000	P= .000	P= .000	P= .000
F2	.1217	.4206	1.0000	-.0506	-.0810	-.0378
	(79)	(79)	(0)	(79)	(79)	(79)
	P= .143	P= .000	P= .	P= .329	P= .239	P= .370
F3	-.1702	.8848	-.0506	1.0000	.8740	.4732
	(79)	(79)	(79)	(0)	(79)	(79)
	P= .067	P= .000	P= .329	P= .	P= .000	P= .000
F4	.0512	.7561	-.0810	.8740	1.0000	.1237
	(79)	(79)	(79)	(79)	(0)	(79)
	P= .327	P= .000	P= .239	P= .000	P= .	P= .139
F5	-.3446	.4122	-.0378	.4732	.1237	1.0000
	(79)	(79)	(79)	(79)	(79)	(0)
	P= .001	P= .000	P= .370	P= .000	P= .139	P= .
F6	-.0584	.6816	.8417	.3180	.1237	.0907
	(79)	(79)	(79)	(79)	(79)	(79)
	P= .305	P= .000	P= .000	P= .002	P= .139	P= .213
COOPERS	.6356	-.1054	-.2008	-.0383	.2503	-.5416
	(11)	(11)	(11)	(11)	(11)	(11)
	P= .018	P= .379	P= .277	P= .456	P= .229	P= .043
F19	-.2186	.4563	.2924	.3594	.1962	.4443
	(74)	(74)	(74)	(74)	(74)	(74)
	P= .031	P= .000	P= .006	P= .001	P= .047	P= .000
F20	-.0564	.0562	.4686	-.1736	-.2015	.0814
	(74)	(74)	(74)	(74)	(74)	(74)
	P= .317	P= .317	P= .000	P= .070	P= .043	P= .245
F21	-.2181	.5315	-.0793	.6301	.4551	.4842
	(74)	(74)	(74)	(74)	(74)	(74)
	P= .031	P= .000	P= .251	P= .000	P= .000	P= .000
F22	-.0678	.3472	-.0263	.3988	.3853	.2580
	(74)	(74)	(74)	(74)	(74)	(74)
	P= .283	P= .001	P= .412	P= .000	P= .000	P= .013
F23	-.0858	.2122	-.0557	.2636	.2187	.0895
	(74)	(74)	(74)	(74)	(74)	(74)
	P= .234	P= .035	P= .319	P= .012	P= .031	P= .224
F24	-.1357	.0832	.4593	-.1390	-.2917	.2530
	(74)	(74)	(74)	(74)	(74)	(74)
	P= .124	P= .240	P= .000	P= .119	P= .006	P= .015
F31	-.1534	.2887	.1567	.2422	.1321	.4509
	(71)	(71)	(71)	(71)	(71)	(71)
	P= .101	P= .007	P= .096	P= .021	P= .136	P= .000
F32	.0007	-.1457	.2253	-.2709	-.3011	.0676
	(71)	(71)	(71)	(71)	(71)	(71)
	P= .498	P= .113	P= .029	P= .011	P= .005	P= .288

F33	-.2231	.5754	-.0179	.6440	.5173	.5795
	(71)	(71)	(71)	(71)	(71)	(71)
	P= .031	P= .000	P= .441	P= .000	P= .000	P= .000
F34	-.0786	.3420	.0637	.3465	.3551	.3174
	(71)	(71)	(71)	(71)	(71)	(71)
	P= .257	P= .002	P= .299	P= .002	P= .001	P= .003
F35	-.1772	.1577	-.1417	.2433	.1548	.1014
	(71)	(71)	(71)	(71)	(71)	(71)
	P= .070	P= .095	P= .119	P= .020	P= .099	P= .200
F36	-.0190	-.0174	.2558	-.1442	-.2385	.2506
	(71)	(71)	(71)	(71)	(71)	(71)
	P= .437	P= .443	P= .016	P= .115	P= .023	P= .018

(Coefficient / (Cases) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Correlations:

	F6	COOPERS	F19	F20	F21	F22
PH#P	-.0584	.6356	-.2186	-.0564	-.2181	-.0678
	(79)	(11)	(74)	(74)	(74)	(74)
	P= .305	P= .018	P= .031	P= .317	P= .031	P= .283
F1	.6816	-.1054	.4563	.0562	.5315	.3472
	(79)	(11)	(74)	(74)	(74)	(74)
	P= .000	P= .379	P= .000	P= .317	P= .000	P= .001
F2	.8417	-.2008	.2924	.4686	-.0793	-.0263
	(79)	(11)	(74)	(74)	(74)	(74)
	P= .000	P= .277	P= .006	P= .000	P= .251	P= .412
F3	.3180	-.0383	.3594	-.1736	.6301	.3988
	(79)	(11)	(74)	(74)	(74)	(74)
	P= .002	P= .456	P= .001	P= .070	P= .000	P= .000
F4	.1237	.2503	.1962	-.2015	.4551	.3853
	(79)	(11)	(74)	(74)	(74)	(74)
	P= .139	P= .229	P= .047	P= .043	P= .000	P= .000
F5	.0907	-.5416	.4443	.0814	.4842	.2580
	(79)	(11)	(74)	(74)	(74)	(74)
	P= .213	P= .043	P= .000	P= .245	P= .000	P= .013
F6	1.0000	-.1317	.3718	.2917	.1896	.0515
	(0)	(11)	(74)	(74)	(74)	(74)
	P= .	P= .350	P= .001	P= .006	P= .053	P= .331
COOPERS	-.1317	1.0000	-.5086	-.6127	-.1073	.1726
	(11)	(0)	(11)	(11)	(11)	(11)
	P= .350	P= .	P= .055	P= .023	P= .377	P= .306
F19	.3718	-.5086	1.0000	.6366	.6560	.4815
	(74)	(11)	(0)	(74)	(74)	(74)
	P= .001	P= .055	P= .	P= .000	P= .000	P= .000
F20	.2917	-.6127	.6366	1.0000	-.1635	-.0609
	(74)	(11)	(74)	(0)	(74)	(74)
	P= .006	P= .023	P= .000	P= .	P= .082	P= .303
F21	.1896	-.1073	.6560	-.1635	1.0000	.6829
	(74)	(11)	(74)	(74)	(0)	(74)
	P= .053	P= .377	P= .000	P= .082	P= .	P= .000
F22	.0515	.1726	.4815	-.0609	.6829	1.0000
	(74)	(11)	(74)	(74)	(74)	(0)
	P= .331	P= .306	P= .000	P= .303	P= .000	P= .

F23	.0895	-.1127	.2915	.0680	.3115	-.3080
	(74)	(11)	(74)	(74)	(74)	(74)
	P= .224	P= .371	P= .006	P= .283	P= .003	P= .004
F24	.3545	-.6780	.6092	.8452	-.0577	-.0304
	(74)	(11)	(74)	(74)	(74)	(74)
	P= .001	P= .011	P= .000	P= .000	P= .313	P= .399
F31	.1490	-.4659	.6180	.5332	.2621	.2187
	(71)	(11)	(69)	(69)	(69)	(69)
	P= .108	P= .074	P= .000	P= .000	P= .015	P= .035
F32	.0552	-.2088	.3405	.6774	-.2254	-.1438
	(71)	(11)	(69)	(69)	(69)	(69)
	P= .324	P= .269	P= .002	P= .000	P= .031	P= .119
F33	.1553	-.4617	.5222	.0265	.6303	.4770
	(71)	(11)	(69)	(69)	(69)	(69)
	P= .098	P= .076	P= .000	P= .414	P= .000	P= .000
F34	.0538	-.4206	.3322	.1697	.2536	.5096
	(71)	(11)	(69)	(69)	(69)	(69)
	P= .328	P= .099	P= .003	P= .082	P= .018	P= .000
F35	.0550	-.0690	.0252	-.1611	.1871	-.2640
	(71)	(11)	(69)	(69)	(69)	(69)
	P= .324	P= .420	P= .418	P= .093	P= .062	P= .014
F36	.1217	-.3624	.4993	.6566	-.0059	.0177
	(71)	(11)	(69)	(69)	(69)	(69)
	P= .156	P= .137	P= .000	P= .000	P= .481	P= .443

(Coefficient / (Cases) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Page 145 SPSS/PC+ 12/20/93

Correlations:

	F23	F24	F31	F32	F33	F34
PH#P	-.0858	-.1357	-.1534	.0007	-.2231	-.0786
	(74)	(74)	(71)	(71)	(71)	(71)
	P= .234	P= .124	P= .101	P= .498	P= .031	P= .257
F1	.2122	.0832	.2887	-.1457	.5754	.3420
	(74)	(74)	(71)	(71)	(71)	(71)
	P= .035	P= .240	P= .007	P= .113	P= .000	P= .002
F2	-.0557	.4593	.1567	.2253	-.0179	.0637
	(74)	(74)	(71)	(71)	(71)	(71)
	P= .319	P= .000	P= .096	P= .029	P= .441	P= .299
F3	.2636	-.1390	.2422	-.2709	.6440	.3465
	(74)	(74)	(71)	(71)	(71)	(71)
	P= .012	P= .119	P= .021	P= .011	P= .000	P= .002
F4	.2187	-.2917	.1321	-.3011	.5173	.3551
	(74)	(74)	(71)	(71)	(71)	(71)
	P= .031	P= .006	P= .136	P= .005	P= .000	P= .001
F5	.0895	.2530	.4509	.0676	.5795	.3174
	(74)	(74)	(71)	(71)	(71)	(71)
	P= .224	P= .015	P= .000	P= .288	P= .000	P= .003
F6	.0895	.3545	.1490	.0552	.1553	.0538
	(74)	(74)	(71)	(71)	(71)	(71)
	P= .224	P= .001	P= .108	P= .324	P= .098	P= .328
COOPERS	-.1127	-.6780	-.4659	-.2088	-.4617	-.4206
	(11)	(11)	(11)	(11)	(11)	(11)
	P= .371	P= .011	P= .074	P= .269	P= .076	P= .099

F19	.2915	.6092	.6180	.3405	.5222	.3322
	(74)	(74)	(69)	(69)	(69)	(69)
	P= .006	P= .000	P= .000	P= .002	P= .000	P= .003
F20	.0680	.8452	.5332	.6774	.0265	.1697
	(74)	(74)	(69)	(69)	(69)	(69)
	P= .283	P= .000	P= .000	P= .000	P= .414	P= .082
F21	.3115	-.0577	.2621	-.2254	.6303	.2536
	(74)	(74)	(69)	(69)	(69)	(69)
	P= .003	P= .313	P= .015	P= .031	P= .000	P= .018
F22	-.3080	-.0304	.2187	-.1438	.4770	.5096
	(74)	(74)	(69)	(69)	(69)	(69)
	P= .004	P= .399	P= .035	P= .119	P= .000	P= .000
F23	1.0000	-.1951	.0904	.0229	.1062	-.2824
	(0)	(74)	(69)	(69)	(69)	(69)
	P= .	P= .048	P= .230	P= .426	P= .193	P= .009
F24	-.1951	1.0000	.5238	.5584	.1444	.2096
	(74)	(0)	(69)	(69)	(69)	(69)
	P= .048	P= .	P= .000	P= .000	P= .118	P= .042
F31	.0904	.5238	1.0000	.7223	.6550	.5374
	(69)	(69)	(0)	(71)	(71)	(71)
	P= .230	P= .000	P= .	P= .000	P= .000	P= .000
F32	.0229	.5584	.7223	1.0000	-.0482	.1439
	(69)	(69)	(71)	(0)	(71)	(71)
	P= .426	P= .000	P= .000	P= .	P= .345	P= .116
F33	.1062	.1444	.6550	-.0482	1.0000	.6177
	(69)	(69)	(71)	(71)	(0)	(71)
	P= .193	P= .118	P= .000	P= .345	P= .	P= .000
F34	-.2824	.2096	.5374	.1439	.6177	1.0000
	(69)	(69)	(71)	(71)	(71)	(0)
	P= .009	P= .042	P= .000	P= .116	P= .000	P= .
F35	.6190	-.2624	.1071	-.0756	.2377	-.4231
	(69)	(69)	(71)	(71)	(71)	(71)
	P= .000	P= .015	P= .187	P= .265	P= .023	P= .000
F36	-.0634	.6790	.7555	.8597	.1528	.1279
	(69)	(69)	(71)	(71)	(71)	(71)
	P= .303	P= .000	P= .000	P= .000	P= .102	P= .144