A COMPARATIVE STUDY OF THE RELATIONSHIP AMONG THREE MEASURES OF SELF-PERCEPTION AND ACADEMIC ACHIEVEMENT IN CANADIAN INDIAN AND WHITE SCHOOLCHILDREN

by

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ABSTRACT

A two-phase study was undertaken to investigate the relationship between self-perception and academic achievement for Canadian Indian and white school children. The purpose of the preliminary study was to create a measure of self as related to moral school behaviour. The purpose of the main study was to compare the scores on this measure to two other existing self-concept instruments and then correlate all three measures with academic achievement. Both phases used Indian and white students from grades four, five, and six.

The preliminary study used the ECHO technique to elicit a hierarchy of "good" and "bad" behaviours. These statements of valued behaviours exhibited significant culture, age and sex differences. Salient behaviours (those with high relative frequency) were chosen to construct a test instrument using a semantic differential format.

The main study used the semantic differential and two other self-concept measures (one verbal, one pictorial) to test the children. There was a significant effect of culture on the verbal measure, sex on the semantic

differential and the pictorial measure and a sex by grade interaction on the pictorial measure. The scores on the three instruments were then correlated with the children's assigned academic achievement levels. Significant positive relationships were found between academic achievement and the verbal measure for both races and between academic achievement and the other two measures for the Indian students only.

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TABLE OF CONTENTS

Chapter		Page
	Abstract	ii
	Table of Contents	iv
	List of Tables	vii
	List of Figures	viii
	Acknowledgements	ix
I	INTRODUCTION	1
	Statement of Purpose	
	Cross Cultural Research - The Native Indian Case	3
	The Native Child and Academic Achievement	9
	Self-Concept and Academic Achievement	12
	Self-Concept - Defined For This Study	17
	Self-Concept Literature - The Indian Case	24
	Self-Concept Assessment Instruments	35
	Cross-Cultural Assessment	35
	Self-Concept Instruments - The Present Study	37
	The Coopersmith Self-Esteem Inventory	39
	The Primary Self-Concept Inventory	42
	The Semantic Differential	42
	The Statement of the Hypotheses	47
	The Preliminary Study	47
	The Main Study	47
	The Coopersmith Self-Esteem Inventory	47
	The Primary Self-Concept Inventory	47
	The Moral Self-Perception Inventory	47
	Self-Esteem and Academic Achievement	47
II	PRELIMINARY INVESTIGATION	49
	The Construction of the Moral Self-Perception Inventory (ECHO Technique)	49
	Subjects	49
	Instruments and Procedure	49

Chapter		Page
	Results and Analysis	50
	The Number of Responses	50
	The "Approvers" and "Disapprovers" - Appraisers	50
	The Categories of Behaviours	51
	Discussion	52
	The Construction of the Moral Self-Perception Inventory	54
III	*METHOD*	57
	Subjects	57
	The Materials	57
	Procedure	57
	The Three Test Instruments	57
	Academic Achievement	58
IV	*RESULTS*	59
	The Major Investigation	59
	The Three Test Instruments	60
	Academic Achievement	62
	Hypothesis One	62
	Hypothesis Two	62
	Hypothesis Three	66
	Hypothesis Four	66
	Hypothesis Five	66
	The Secondary Investigations	68
	The Three Test Instruments	68
	The Moral Self-Perception Inventory "Extra Items"	72
	The Coopersmith Subscales	72
	Academic Achievement	75
V	*DISCUSSION*	76
	Introduction	76
	The Major Investigation	79
	The Secondary Investigations	83
	Conclusions	86

Page

REFERENCES 87

APPENDICES - *A - The Coopersmith Self-Esteem Inventory* 96

B - The Twenty ECHO Cards 99

C - Instructions for the ECHO Responses 101

D - Mean Number of ECHO Responses Per Question by Culture 104

E - Categories of "Approvers" and "Disapprovers" 106

F - The Sorting of the ECHO Responses . 108

G - The Categories of ECHO Behaviours . 110

H - A Discussion of the Preliminary Study Results 112

I - The Values Used in the Construction of the Moral Self-Perception Inventory 115

J - The Moral Self-Perception Inventory "Extra Items" 117

K - The Moral Self-Perception Inventory 119

L - The Instructions for the Moral Self-Perception Inventory 123

M - The Academic Achievement Rating Request 126

N - Pearson Correlation Coefficient Matrices Illustrating the Relationships Among the Three Test Instruments, Academic Achievement and Sex and Grade - Separately By Culture and With Cultures Combined 128

LIST OF TABLES

Table		*Page*
1	Mean Scores By Culture, Sex and Grade on the Primary Self-Concept Inventory	61
2	Mean Scores by Culture, Sex and Grade on the Moral Self-Perception Inventory	63
3	Mean Scores by Culture, Sex and Grade on the Coopersmith Self-Esteem Inventory	64
4	Mean Academic Achievement Ratings by Culture, Sex and Grade	65
5	Coopersmith Lie and Academic Subscale Mean Scores by Culture, Sex and Grade	74

LIST OF FIGURES

Figure		*Page*
1	Some Factors Relating Childrens' Self-Concepts and School Achievement	41
2	The Relationship Between Coopersmith Scores and Academic Achievement	67
3	Mean Primary Self-Concept Inventory Scores by Grade, Sex and Culture	68
4	The Relationship Between Primary Self-Concept Inventory Scores and Academic Achievement by Culture	69
5	The Relationship Between Moral Self-Perception Inventory Scores and Academic Achievement by Culture	70
6	Mean Primary Self-Concept Inventory Scores by Grade, Sex and Culture	73

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CHAPTER I

INTRODUCTION

Statement of Purpose

Contemporary Canadian society exists as a multi-cultural patchwork of races. The geographical distribution of varied ethnicities across Canada creates a wealth of cross-cultural situations with distinct and inherent problems for each specific case. Each ethnic group deals with minority-majority confrontation in a manner unique to its own belief and value system.

The native Indian population of North America appears to have many problems with entry into the competitive mainstream, some researchers feel that theirs is one of the greatest culture shocks experienced by any minority group (Bahr, Chadwick, and Day, 1972; Rosenthal, 1974; Coleman, 1966). Education is a major preparatory variable for this entry into the society of the white majority and statistics in this regard demonstrate that Indians have not entered Canadian academic life successfully (Hawthorne, 1967).

There is a complex network of interacting variables which affects the performance of Native American children

upon their entry into the school system. Of the many factors which have been linked to Native academic failure, Bahr et al. (1972) have isolated three which are of major importance - language deficiencies, cultural deprivation and attitudes about one's self (p. 128). Although the variables which affect a child's receptivity to teaching often perform the most damage when dynamically combined, self-concept has been directly linked to academic success.

The nature of the relationship between these two variables has not been empirically defined for either the majority white culture or the various ethnic minorities but previous research has suggested developmental trends. Whether self-concept is directly or inversely related to academic proficiency for Indians, once the connection has been accurately described, a measure of self-concept should be a useful diagnostic tool for future school problems.

Research, to date, has not (in the author's opinion) covered the cross-cultural application of measures of self-concept sufficiently. Culture-bound instruments have been used to assess and compare the self-worth of varied Indian groups and these results have been combined with other measures to produce doubly confounded conclusions.

Assuming that there is a relationship between academic achievement and self-regard for Indian students, an instrument which taps the relevant area of self-perceptions could

predict potential school aptitude. The problem lies with the self-concept measure itself. Academic achievement, as defined by the school system, can be assessed by the student's grade point average. Academic self-worth, as experienced by the Indian student, is not so clearly quantifiable. The construct is less tangible and traditional approaches at self-concept may fail in this area in their validity for cross-cultural application.

Previous research has not focussed on comparing separate self-concept instruments, Manaster and Havighurst (1972) stated that "few studies use more than one measure of the self-concept" (p. 57). The present study has three major purposes. Firstly, it will attempt to create an instrument to measure academic self-regard for Indian children. Secondly, using similar groups of white and Native schoolchildren this measure will be compared to two other existing self-concept instruments. Finally, all three measures will be correlated with academic standing in order to examine the nature of the relationship between the two variables.

Cross Cultural Research - The Native Indian Case

"Culture-free" tests for use in the comparison of two or more cultures are at best culture-reduced, at their worst - culture-bound. Cross cultural research and the

development of such tests faces a universal problem of validity. Within each specific population the variables affecting the type of measure chosen for use are diverse and complicated.

Each culture contains weighted amounts of a multitude of separate variables affecting cross-cultural confrontation. There are many instrumental variables in this type of research - the degree of and reaction to acculturation, the demographic numbers involved in the minority-majority ratio, the strength and divergence of existing value systems and the experimenter's own familiarity with each of the populations under observation.

According to Spindler and Spindler (1971) there are four ways for a minority to deal with the conflict caused by confrontation with a dominant cultural majority. The four options are arrayed on a continuum. The two polar alternatives are - to completely abandon the past and assume the majority identity, or maintain the traditional culture except for those characteristics which are absolutely unacceptable to the majority. The two less radical choices are to keep an ambiguous identity, a diplomatic non-assertion of self, or to choose characteristics of the majority culture which can be adapted for a useful purpose by the minority (religion, for example). Regardless of the method chosen to deal with this confrontation Spindler

and Spindler say that the minority will "suffer severe disturbance in every sector of life" (p. 379).

Minority group members who exist in a state of limbo seem to exhibit the most personal and social disorganization (Spindler and Goldschmidt, 1952). This, coupled with the ongoing self-identity crisis of middle childhood would seem to put Indian children at a special disadvantage.

The original solution to Indian-white culture contact problems (the reserve system) seems inappropriate for modern society. If native Indians chose as a common goal to attempt self-sufficiency, maintain previous social systems and remain removed from modern technology, then perhaps the isolated community would be successful. This method is not the choice that many modern Indians have made however, they are motivated towards equal roles within contemporary society.

As far as actual demographic ratio is concerned, it has been shown that most instances of minority dissatisfaction arise from integrated communities (Fuchs and Havighurst, 1972) but that geographical proximity is not necessarily a constant factor. Lefley (1976) reported more social disintegration in a highly acculturated reserve which was removed from the white majority community than in a reserve which bordered the white centre but had remained culturally intact. Conversely, Berry (1976) cited a geographically

removed Tsimshian village which had retained its traditional social order by rejecting outside influence and controlling visitors.

The minority-majority problem is, in the Indian case, situation specific. For example, while the Indian population is in a minority nationally often in certain communities (usually reserves), classrooms and work situations, the native Canadian is cast in the role of the majority. In these instances, where the cultural group appears to remain more intact, the situation receives a higher overall rating. Fuchs and Havighurst (1972) found that Indian students rated their school more favourably if it contained a stable core of less acculturated native students and Hawthorne (1967) found that communities which valued Indian culture devalued school.

An intact, crystallized system of values whether they are cultural or personal, is instrumental to good self-identity. If these values are contrary to those of the majority culture, internal conflict arises. Yamamoto (1970) stated that cultural differences in themselves "send a child to school ill-equipped and already defeated" (p. 55). The Indian experience of culture contact may result in a stronger value disintegration than most. Bryde (1970) commented that not only do they face ethnic differences but socio-economic alienation as well. Indian

status often goes hand in hand with poverty and the two combined create the most culturally disadvantaged group in America (Johnson, 1970).

Part of the disadvantage experienced by Indians may be due to their own strong sets of values and beliefs. Spindler and Spindler (1971) studied Ojibwa at three different levels of acculturation and found each group equally retentive of native psychological features. Lesser (1961) supported this view stating that what may appear externally as acculturation is not paralleled in attitudes and personality.

The native system of values varies from the white system on a number of issues which presents problems for cross-cultural research and comparison. These problems are especially prevalent in research related to education. Cultural attitudes transform the school years for the native child into a foreign and often humiliating experience. There are many aspects of the Canadian school system which are totally divergent from basic Indian ways. The Indian learns by observation, not trial and error; he will not attempt a task until he is assured of proficiency (Spindler, 1971; Hawthorne, 1967). Heath (1972) stated that the native child is in fact embarassed when exhibiting excellence. Indian cultures also value cooperative methods over competitive ones (Lewis, 1970; Hawthorne, 1967;

Johnson, 1970) and Berger (1973) found that what the white majority interprets as a lack of competitive motivation is in fact polite deference on the part of the Indian. Child-rearing practices are permissive by white standards and independence, bravery and courage are highly valued - little discipline is used and white schools are often the first restrictive institutions met by Indian children (Lewis, 1970; Spindler and Spindler, 1971; Hawthorne, 1967).

The concept of clock time is of little importance and Indians emphasize the present rather than the future (Hawthorne, 1967; Zentner, 1973). Coupled with this interest in the here-and-now rather than planning for eventualities is a belief in man's subjugation to nature. In contrast to white beliefs of mastery over the environment, the Indian feels that fate is instrumental in determining his future (Gue, 1967).

In addition to variations in inherent value systems, demographic composition and culture-contact experience, personality research in the Indian situation is further restricted by information-gathering methods. Traditional natives believe in non-demonstrative emotion (Spindler and Spindler, 1971) and are reticent to voice opinions or feelings (Bayne, 1971). Given that opposing values exist, determining the strength and consequences of their effect is difficult when discussing personal matters is not generally accepted.

The Native Child and Academic Achievement

Few educators would argue that the native child's experience in the public school system matches that of the white child. As Bruce Chadwick (in Bahr et al., 1972) stated the "educational feast . . . is inedible to the Indian student by virtue of his culture" (p. 141). The difference is not in the global concept of gaining an education per se but the mechanisms involved in attaining this goal. Majority American Indian groups have stated that education is necessary and desirable for contemporary existence (Fuchs and Havighurst, 1972; Berger, 1973) and research has shown that while Indian students may not have the same degree of positive attitude toward aspects of education, their attitudes are nonetheless still positive (Clifton, 1975). The motivation exists but the tools provided are inappropriate for the job. With the large number of existing variables which affect native academic performance, Bahr et al.'s (1972) choice of three major variables (language deficiencies, cultural deprivation and attitudes about one's self) may seen simplistic. These three, however, cover the main quantifiable areas. Although this work will be emphasizing the role of personal attitudes, it is the interaction of these attitudes with the cultural and environmental factors surrounding the child which blend to create

the greatest detriment to academic achievement.

Cultural deprivation, if accepted as a cause for academic failure, assumes a state of vacuum which creates the 'disadvantaged' or 'deprived' child. It assumes a passive lack of skills rather than a conflicting repertoire of behaviour. Studies have shown (Wilson, 1973; Hawthorne, 1967) that the Native child's school experience is similar to that of the lower class white child. Both come to school from non-enriched home environments where verbal skills are not stressed. Kinsella (1971) referred to a lack of familiarity with the basic tools of the trade - crayons and books - which cripples the Indian child in his first years of school.

The "vacuum" experienced by most disadvantaged children is further confounded for the Native child by his own cultural values. As well as insufficient exposure to important verbal and non-verbal stimuli often a separate system of learning has already been adopted. Both motivation and communication differences may affect the child's academic aptitude. He has not been prepared for an individualistic, competitive approach to learning but already has a well-founded cooperative view of gaining new skills (Wax, Wax and Dumont, 1964; Johnson, 1970; Miller and Thomas, 1972). A child who enters a competitive system when his own approach is cooperative cannot hope to do as well in the

final evaluation, "school experiences tend to controvert some of the basic learning which takes place in pre-school years and in nonschool activities" (Rohner and Rohner in Spindler and Spindler (1971) p. 183).

Many researchers have documented the minimal grasp of English grammar of schoolage Indian children (Hawthorne, 1967; Johnson, 1970; Mickelson and Galloway, 1973) but these inferior verbal skills are confounded by superior non-verbal skills. Given the scarcity of elementary teachers trained in cross-cultural differences (Heath, 1972; Sawyer, 1976) these non-verbal communications are seldom understood, at best overlooked and unfortunately often misinterpreted. Castellano (in Waubageshig, 1970) stated that even if the child "has fluency in English, the most meaningful communciation is in the mother tongue or through a system of non-verbal cues which are read by Indians and missed by others" (p. 53).

The issue of cultural deprivation for the Native student does raise some vacuum areas and many culture conflict areas (Haugen, 1971). However, as Lane (1972) has pointed out, these more tangible cultural attributes may "serve as a smokescreen diverting attention from other issues" (p. 359). It is with these "other issues" that the present study is mainly concerned, more specifically - the less tangible variables of self-perceptions.

Self-Concept and Academic Achievement

The assumption that an accurate measure of academic self-regard for Indian children would be a useful and practical instrument is based on the previous assumption that a relationship exists between self-concept and academic achievement for this group. Previous research provides varied evidence for this proposition. Included in the consideration of self-concept and school performance is the native student "crossover phenomenon" and also a type of "chicken and egg" controversy. Do Indian students manifest low self-perceptions because of poor achievement or do the students' low self-concepts lead to academic failure?

Lipton (1963) felt that the "roots of desire to learn are deep and are multibranched" (p. 211) with self-value existing as one of the most important branches. The nature of the relationship between self-concept and academic achievement is ambiguous. Research has linked the two in three separate manners - firstly stating that the two are positively correlated but there may be other variables affecting the relationship, secondly with proficiency directly affecting esteem and thirdly with the level of personal esteem affecting academic achievement. Purkey (1970) referred to the interaction as a two-way street and

Chadwick (in Bahr et al., 1972) saw the relationship as circular.

The most direct relationship appears to be a causative one between poor performance and low esteem. Purkey (1970) stated that low grades lessen esteem and good grades improve it. Other researchers have theorized that the low grade-low esteem link self-perpetuates with the development of a negative response set (Zirkel, 1971; Rohner, 1942). The inverse causal relationship (low esteem causes low grades) has more ambiguous evidence. Samuels (1977) suggested that more extensive research was necessary such as a longitudinal study which commenced before school entry. Aboud (1977) stated simply that "in order to learn more basic academic skills one must have developed a self-concept which can accommodate such skills." (p. 1).

Due to the lack of experimental research regarding a direct causal relationship between self-esteem and academic achievement, there are currently more data gathered through post hoc comparisons. These examinations of the data have found positive correlations between the two variables. The research to date which has supported this theory of a positive correlation between self-esteem and academic achievement (Leonetti and Muller, 1976; Purkey, 1970). Chadwick (in Bahr et al., 1972) finds the relationship stronger for males (Purkey, Chadwick) and stronger for Spanish Americans (Leonetti and Muller).

Church (1977) compared actual, ideal and future self-

concept in white and Navaho students. He then correlated his findings with each other and with IQ, academic achievement and occupational aspirations. All of the measures of self-concept were positively inter-related for each race but were not significantly related to the academic measures. Unexpectedly, the Navajo group showed a more positive relationship between self-concept and academic measures than the white sample. Church's study, however, used only one age group, a high school senior class. This sample may have been biased, previous work has suggested that the Indian student who does not drop out before high school may have a higher self-concept which is linked to his perseverance.

The native "crossover phenomenon" is illustrated by some progress reports which show that native children achieve well until grade five and then fall into a program of underachievement (Hawthorne, 1967). Bryde (1970) concluded that this decline was not due to generalized adolescent conflicts as a similar trend does not appear in the white student population. Saslow and Harrover (1968) stated that the phenomenon had a more developmental basis. At grade five the crystallizing self-identity of the minority child undergoes more trauma than that of the majority child and therefore the crisis leads to a decline in performance.

Belief in the crossover phenomenon is not universal (Fuchs and Havighurst, 1972), but regardless of the age of

onset or the nature of the problem, the native population is under-represented at the secondary school level. Statistics show that 80% of all Canadian Indian students repeat grade one and there is an average grade retardation of 2.5 years overall (Hawthorne, 1967). This grade retardation often leads to academic and social frustration which in turn contributes to the dropout rate.

Martig and DeBlaissie (1973) examined the literature on Indian self-concept and educational attainment and concluded that poor performance was not due to feelings of personal inadequacy. Larson (1967) stated that native children entering school in fact often possess a positive self-concept which others have not yet attained. Perhaps it is this strong ethnic identity which provides the most crippling factor for a damaged self-concept in school - "the youth who retains his Indianness and strongly identifies with the Indian model will probably have difficulty in fulfilling and internalizing the newly presented goals of the school" (Kinsella, 1971, p. 14). Harms (1977) investigated "learner" self-concept and concluded that there were no significant differences between whites, Blacks and Indians in confidence to learn the presented curriculum.

Specific correlations have been run between self-concept and academic achievement. Fuchs and Havighurst (1972) found a positive relationship between class rank and level

of esteem for Indian students but suggested that the trend was weak, and similar to findings with lower socio-economic status whites. Both this study and the findings cited by Chadwick, Bahr and Strauss (1977) and Purkey (1970) supported sex differences - the correlation was higher for males than females. Lefley (1975) related grade point average to esteem for native students in Florida and found correlations of .15 and .16 compared to white results of .30. Clifton (1975) found that both white and native high esteem students rated school more positively than low esteem students.

The varied findings of these different examinations of the two variables of self-concept and academic achievement may be the result of one of many separate theoretical interpretations of the problem. The construct of "self-concept" alone gives rise to a myriad of separate connotations which have led to an equally diverse array of assessment procedures. These, coupled with the various inconsistent methods of assessing academic excellence, account for a large percentage of experimental variation before the two variables have even been combined.

Other variables than self-concept may prove to be more significant predictors of school performance for native children. Purkey (1970) linked reading ability, Bowd (1972) suggested that the command of the English language is

important and Chadwick (in Bahr et al., 1972) pinpointed attitudes concerning mastery over nature. For each variable which has been isolated as related to academic achievement there are likely just as many which remain undiscovered. It is fruitless to conjecture about a web of covarying factors without attempting to narrow the speculation on a given one. Should an aspect of a native child's self-concept be related to school performance, then the present study will attempt to illustrate the direction of the relationship. The nature of the relationship, the cause-and-effect, chicken-and-egg aspect will likely remain undefined.

The Self-Concept - Defined For This Study

The self-concept, as a personality construct still exists as an ill-defined, over-used, catch-all phrase representing anything from a Freudian-style unconscious desire to observable human interaction. As Wylie's (1974) comprehensive work states "we cannot attempt in this book systematically to review, compare, criticize or put in order the various non-operational definitions in common use" (p. 4). The only fact which seems to have been accepted universally in research is that, as a label, self-concept sits at the top of the family tree. Zirkel (1971) pointed out that a major problem in all self-concept research is

the distinction between uni- and multi-dimensional definitions. The construct has been used as a finite term and a composite term but perhaps the problem of definition is as simplistic as Johnson's (1970) statement - "self-concept is society's popularity contest in which all are entered and each is his own judge" (p. 24).

As most methodological problems with self-concept seem to come from operationally defining the term, the present work will not be as concerned with outlining the various theoretical positions (see Samuels (1977) for this) as it will be with defining the construct for use in this study. Here the self-concept will be treated as a composite term, a conglomerate of past and present environmental references which combine various facets of human interaction.

While some researchers simply refer to a basic self-worth and index of self-evaluation (self-esteem) many are now accepting that an individual's behaviour in a given situation is based on many different perceptions of the self. Samuels (1977) views the self-concept as the sum total of the separate constructs of social self, body self, cognitive self, and self-esteem.

Using an open-ended "tell us about yourself" format both Sears and Sherman (1964) and McGuire and Padawer-Singer (1976) pinpointed areas of self-concern for school age children. Sears and Sherman isolated ten areas which were

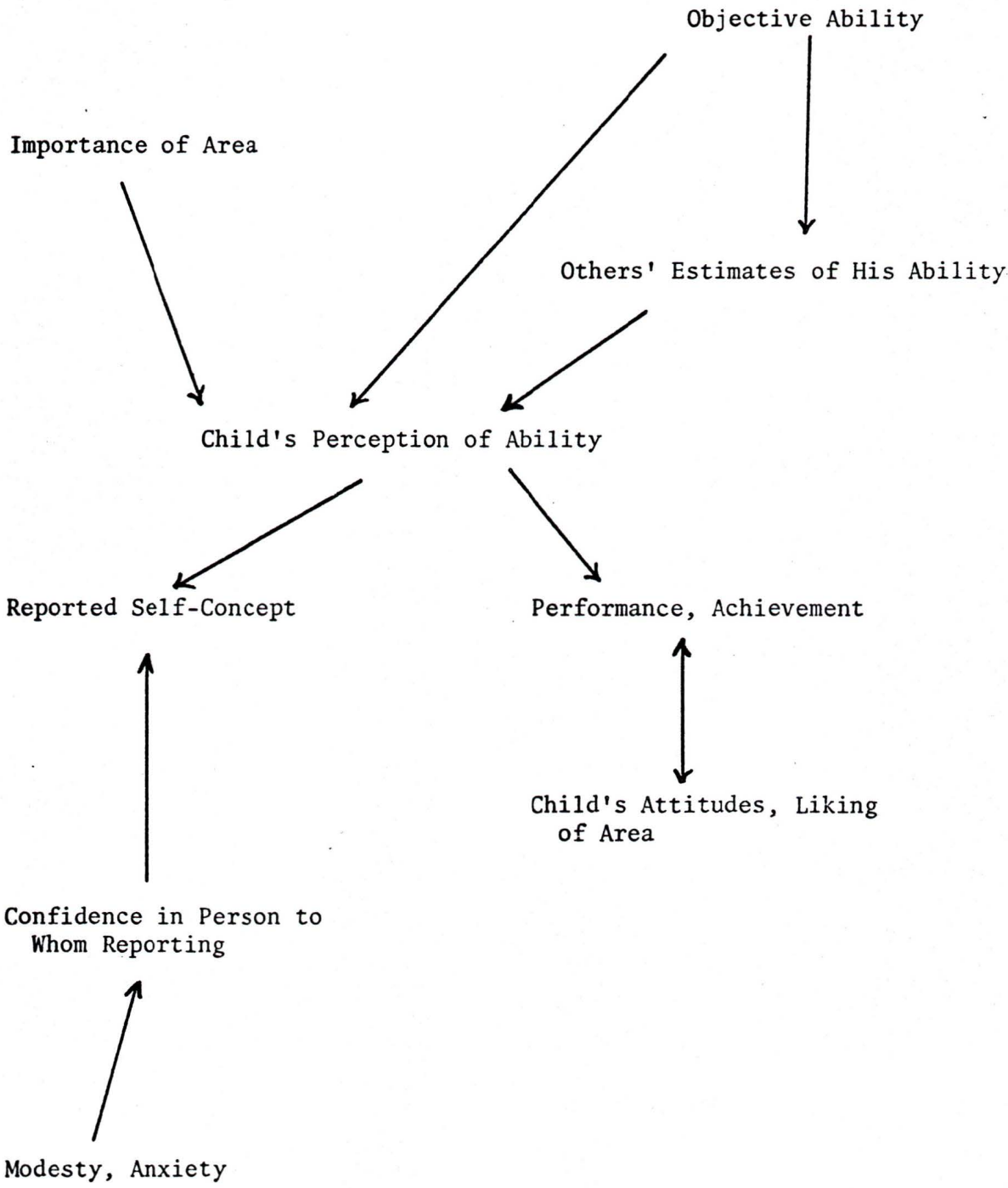
specifically relevant to school life - physical and mental ability, social relations with peers and teachers, appearance, work habits, school subjects, social virtues and "happy" qualities. McGuire and Padawer-Singer analyzed their results by frequency of response and formulated a hierarchy of interests by the percentage of references made. Only 15% of the responses referred directly to school and only 7% to self-evaluation. They concluded that there is a "disproportionate emphasis" (p. 749) on self-esteem in the literature when it constitutes only 7% of a child's self-concept.

Assuming that self-concept is a composite term, and given that it can be classified into separate interest areas for a schoolchild, one would assume that specifics of academic and self-evaluation references could combine to create an independent area of self-perception - one concerning academic achievement. Conversely, for the same reason that this area can be isolated from the whole it is not autonomous from this whole. Academic self-worth cannot be examined without allowances for the majority areas of self-concept which differentially influence it. Given that the self-concept covers varied perceptions of the self which also vary contexturally, that part of self-esteem which is relative to academic achievement is a small part of a larger network.

At this point cultural differences must be considered again. If a white sixth grader feels that 15% of his self is concerned with school and 7% with self-evaluation, are these percentages going to be paralleled by an Indian sixth grader? Very likely not - in a culture which has traditionally devalued formal education, one would expect a much smaller percentage of overall self-regard to be concerned with school. Sears and Sherman (1964) have graphically illustrated the different factors contributing to a child's self-concept and school achievement (Figure 1). If only three of the seven factors they isolated as pertinent are examined, cultural problems are already evident.

For the Indian student the "importance of the area" is instrumental in his motivation towards a subject. A child who has been raised amidst adult role models of loggers and fishermen (Aziz, 1970) will not see the relevance of a course in social studies or algebra. This interest will affect his "attitude and liking for the area", a course which is not valued as important and is also difficult will often be disliked and approached with a negative attitude. The "Pygmalion effect" has also often been cited in reference to Indian students (Chadwick in Bahr, et al., 1972; Beuf, 1977). The Sears-Sherman factors include "others' estimates of his ability", contending with teachers who may assume that his ability is less, the Indian child is

Figure 1: Some Factors Relating Children's Self-Concepts and School Achievement



handicapped by negative treatment in comparison to his white peers. Davidson and Lang (1960) found a positive relationship between a child's self-concept and his perception of his teacher's evaluation.

Examining only three of the seven factors cited, it is obvious that the Indian situation differs from the white situation. Considering these differences it would be fruitless to expect that the Indian student would place a similar relative importance on his academic self-concept.

Therefore, a comparison of Indian and white students on measures of academic self-esteem demands consideration of not only qualitative but quantitative differences as well. The percentage of overall self-concept which is occupied by academic achievement will likely be much smaller for the native population. In essence, the personality area to be tapped may, in the majority of Indian cases, be more elusive than in the white situation.

Self-concept, as a construct, inherently assumes a social basis. If we accept a social self-concept, then we must accept its relativity rather than absoluteness, as Ziller (1973) stated - it evolves and changes with context. A child who is competent in most areas of his daily life and has an accompanying aura of self-worth may face a new situation in a variety of ways. If he feels he is either ill-equipped to tackle the task or it is one which will reap

him no benefits, he may withdraw completely, devalue the task and maintain his own worth. He may also continue to value the task, assume himself incapable, and devalue himself for not attempting it. If he should attempt the task, then some sort of decision must have been made upwards regarding his own capabilities or positively regarding the benefits of the task.

The mechanics of school achievement for the Native North American peoples parallel those of culture contact-assimilation, rejection of the majority or bicultural existence. Spindler and Spindler (1971) stated that contact with the majority culture and its inherently different value system destroys the minority self-image. If this argument is founded, then the same mechanisms may exist at more specific levels. Entry into the academic world may present such a divergent learning system that the self-esteem needed for success is shattered. Lefley (1976) concluded that self-esteem was the "one personal dimension most likely affected by exposure to the values of a superordinate society" (p. 387).

Does the Indian student think himself capable of academic success but see no point in trying for a goal which is meaningless to his way of life, or does he not think himself capable of trying? In rejecting education he either devalues it or himself. In accepting education he is

either confident of his own potential or aware of an end goal which necessitates education or both.

The present study will investigate that part of the self-concept which is related to academic achievement. Research has shown that the separate components of self-concept may be valued differently - a child may value his social role and body image while devaluing his role as a student (Samuels, 1977). In the present school system academic attitudes do not exist in isolation; school provides a social milieu"separate from the home"which can differentially affect a child's motivation. With the reserve system still in operation the social dichotomy is especially prevalent for Indian children who return home each day from the host community to a separate community with a unique social system.

Although self-worth and esteem are an integral part of a child's total existence the present research will investigate only those aspects which pervade the school experiences - "self-esteem results when the child is able to predict success for important facets of experience" (Sears and Sherman, 1964, p. 10).

Self-Concept Literature - The Indian Case

Previous research using self-concept measured cross-culturally has produced copious amounts of contradictory

literature. As well as variations due to real differences, many experimental inconsistencies have occurred because of the persistent use of inappropriate instruments. As noted already in this paper, cross-cultural work demands more than lip service to inherent characteristics and many of the earlier studies have ignored this demand almost completely. Hence contradictory literature has appeared with shallow interpretations.

Clifton (1975) stated that of all the variables related to self-concept in children - race, sex and school grade are the most important. Although important for any ethnic minority, race becomes especially salient and complex in the Indian situation. The basic effects of racial characteristics are confounded by socio-economic status and a strong set of cultural beliefs. Whereas many ethnicities are spread throughout the social system, Canadian Indians are over-represented in the lower economic classes making it difficult to separate the effects of race from class. Similarly, race cannot be considered without culture as the American Indian still maintains many traditional beliefs, customs and values.

Typically, research comparing Indian and white children on various self-concept measures has shown the white group to have a more positive level of self-esteem (Chadwick, (in Bahr et al.) 1972; Clifton, 1975; Lefley, 1975; Martin,

1978; Rosenthal, 1975). Within these results there were several related findings - Rosenthal concluded that the Chippewa had the lowest esteem of any American minority, and Lefley found her Indian sample to have a more homogeneous range with less standard deviation than the white group.

Research indicating comparable self-concepts across cultures is still scarce. This is hardly surprising if, as Coombs (1970) wrote, the Indian culture emphasizes self-denunciation. Most of those who have narrowed the range of interracial scores are rejecting traditional instruments (McCluskey, 1975; Martig and DeBlaissie, 1973; Lammers, 1969; Church, 1977; Dreyer and Havighurst, 1970).

Aboud (1979) tested Indian children in grades 2, 3, 5, and 6 with the traditional Coopersmith Self-Esteem Inventory and found only slight culture differences. She did, however, find that simply taking the test seemed to alter a child's self-perceptions. Those students with lower self-concepts raised them after the test experience and those who had previously manifested high self-concepts lowered them after the test experience.

An extensive study of American Indian education (Dreyer and Havighurst, 1970) looked at native self-esteem in seven geographical areas. Using a combination of two instruments the study found few racial differences but did indicate a lower female Indian self-concept. Other research has shown

within-race sex differences as well. In her work with a matrilineal tribe Lefley (1975) found higher female self-concepts and Martig and deBlaissie (1973) also found their female students to be higher in "total self" and "emotional self" than males. Baha (1965) cited a higher reference to ethnic identity by native girls.

An instrument which is created by the majority culture is not necessarily transferrable to a minority and one which is appropriate for one minority is not necessarily so for another. Weisgerber (1972) tested Chicanos, Indians, Blacks and whites on "present", "reflected" and "ideal" self. While both the Chicano and Indian group rated lowest on the measures (Indians lowest on "ideal" self) the Blacks scored equally with the white group. It would seem that each ethnicity has situation-specific characteristics which are affected by variables other than simply minority status.

The problem of class standing confounds the relationship between race and self-concept. McCarthy and Yancy (1970) stated that lower class Blacks will manifest a higher self-esteem than whites on the same level because of the middle-class white reference group. Fuchs and Havighurst (1972) concluded that the same was true for natives, as long as the reference group consists of an Indian majority self-concept scores will be higher. Cockerham and

Blevins (1976) also accounted for the recent favourable native scores with this theory - if the testing is conducted within a group's natural culture the results will be more positive.

This minority-majority consideration is entangled with acculturation levels and McGuire's distinctiveness theory. According to McGuire et al. (1978) we "attend to that which is different," situational and social determinants become an important part of our frame of reference. He illustrated that a minority group member is more likely to include his ethnicity (distinctiveness) in a spontaneous self-concept than a majority group member. If a characteristic appears in a context because of its uniqueness and this same characteristic is not a valued one, then the individual must deal with it cognitively. Baha (1965) found 60% of the natives in his study referred to their race while only 7% of the whites did. McGuire found many individual features to follow the same pattern. If the distinctiveness theory is warranted, then almost any personality construct in a polar position would be a salient part of the individual's self-regard. Any part of an individual's behaviour which is eccentric or unique from the majority of his reference group, from the middle range of the distribution, would be an object of concern and therefore an item for consideration. Whether the child is failing or excelling, it will

be an object of concern.

Given an Indian child's position in white society his distinctiveness will not receive the positive sanctions conducive to positive self-esteem. Canadian society is stratified into classes with race as an important determining characteristic (Driedger, 1978). If minority ethnic group membership creates a heightened awareness of ethnicity and this ethnicity is not valued by the majority, then it would seem to follow that self-esteem will suffer. Research supports this theory. Lefley (1976) found that her less assimilated subjects had higher ethnic self-concepts and Hawthorne's (1967) extensive work also concluded that self-image varied with Indian-white relations. This theme appears in Fuchs and Havighurst (1972) also. They concluded that there was a positive relationship between self-esteem and attitude towards Indian and white cultures in rural schoolchildren. As the age of the sample increased, the strength of the relationship increased for the Indian culture and decreased for the white. Urban children showed more radical trends - self-esteem was positively related to attitudes towards Indian culture and negatively related to attitudes towards the white culture.

The Indian child is often exposed to a dualistic class system. While he may have aristocratic kinship ties on the

reserve, his race and economic status place him in the lower classes of Canadian mainstream society. Purkey (1970) concluded that economic factors are not necessarily a cause for low self-esteem but Samuels (1977) views class as more pervasive than race in determining self-concept, especially in the academic sphere.

Withycombe (1973) examined social self-concepts by correlating self-esteem, social status and perceived social status for a group of Indian and white schoolchildren. She found that the native children with higher self-concepts also occupied a higher social rank. This relationship did not hold for the white group - a high self-concept did not necessarily relate to higher status. However, the white children did show a positive relationship between perceived and actual status. Withycombe suggested that high self-esteem natives fashioned themselves on white ideals which led to social acceptance. Perhaps in fact her findings were due to the type of instrument used to measure self-concept. Instead of tapping high self-esteem per se, she extracted high white esteem and her high-esteem native group were simply highly assimilated. These students may have conformed to white ideals of personality traits and therefore achieved the accompanying social status.

Research which shows a declining native self-concept with age may also be reflecting a cultural barrier in the

testing instrument. Either the schoolchild may actually be manifesting a lower esteem with increasing age due to his high school experiences of failure; or perhaps the emerging movement of Indian pride may have caused him to reject the white culture and therefore score badly on culture-bound instruments. Both Clifton (1975) and Lefley (1975) cited declining scores with age while Aboud (1979) cited only minor age differences. Samuels (1977) stated that self-concept crystallizes quite early in childhood and resists alteration. If this is so, it would suggest that white instruments are tapping something other than a comparable construct of native self-esteem.

Age, as a variable in self-concept, is confounded with school. While some research indicates clear age effects, other work relates this to education. Martin (1974) cited lower scores with increasing grade level independent of age. Fuchs and Havighurst (1972) concluded that the initial grade retardation many native students experience in grade one continues through the years. A circular relationship then develops. Initially the child loses esteem because of his increased age in comparison to his classmates. His performance suffers because of this, failure follows and the cycle continues. Even the structure of the school itself may differentially affect self-concept. Cockerham and Blevins (1976) found "open-plan" school

Indians to have higher self-regard than both whites and Indians in a traditional school setting.

Cultural beliefs may account for many of the racial differences in self-concept scores using traditional instruments. Assuming that each ethnicity has certain values unique to themselves, then a construct which is highly esteemed in one group may be of little consequence to another. A measure may reflect this difference by value-weighted concepts which are not controlled cross-culturally.

Native child-rearing practices receive much criticism from those theorists who believe in strict guidance and supervision. The Indian belief in a child's free spirit and need for exploration seems irresponsible to many outsiders. Coopersmith (1967) found that children with high esteem have strict, less permissive parents. Obviously a self-concept instrument which follows this format will underestimate a child raised permissively.

The Indian time orientation towards the present rather than the future also needs to be considered in research concerning the self. White society honours future aspirations and values approximations towards a distant goal. Once again a measure which rewards goal-setting and projected achievements will handicap a child with only current interests.

Prevalence of a cooperative rather than competitive motivation in Indian society potentially affects esteem scores as well. An instrument that favours confidence in individual rather than group-gain will penalize the child whose attitudes are cooperative.

The native belief in man's subjugation to nature poses a more entwined relationship with self-regard. The white view of man as actively dominant over the forces of nature opposes the Indian view of nature and fate as omnipotent and man as a more integrated part of nature, a passive recipient. This inner versus outer orientation classes the native culture as field dependent and the white culture as a controller of the environment. Ziller (1973) suggested direct relationships between these two orientations and self-regard. High esteem individuals control the environment and those of low esteem are field dependent. Martin (1978) correlated self-esteem with locus of control for three age groups of Indian and white schoolchildren and found high esteem to be positively related to internality at each age level. Stanwyck and Felker (1971) also supported this theory with data showing that high esteem children credited their success to themselves rather than to their environment or fate. Chadwick (in Bahr et al. 1972) used evidence of a relationship between academic failure and subjugation to nature as a link between the latter and

negative self-concept.

Aside from the over-riding value systems which may affect the assessment of self-concept in Indian children the demand characteristics of the testing situation may also differentially alter score results. Test taking in itself is a foreign concept in North American Indian society. The particulars of various test forms will be discussed later in this paper but the "race of interviewer" is an issue which always demands consideration in cross-cultural work. As in black-white work, previous research in this area indicates varied results. Lefley (1975) tested in both English and the local native dialect. She found ethnic self-esteem higher when English was used and personal self-esteem higher with the mother tongue. Both Beuf (1977) and Rosenthal (1974) used white and Indian testers and found no significant score differences and Samuels (1977) concluded in her review of the literature that the results were variable. Little and Ramirez (1976) found that a white tester elicited higher esteem from Chicano students and concluded that this result was due to their familiarity with white as opposed to Chicano evaluation. It would seem, therefore, that if there were interviewer effects in white-Indian research, they would be favourable towards the Native sample.

Self-Concept Assessment Instruments

Cross-Cultural Assessment

In cross-cultural research the experimenter tries to locate seemingly culture-free tests. Simply by the nature of the researcher's own race culture-free becomes impossible and culture-reduced becomes the goal. The very act of filling out a written form may be foreign to the group under investigation.

Whether the nature of the research is to illustrate that there are psychological principles which have no cultural boundaries or that there are in fact culture-specific traits, cross-cultural research must assume that some differences exist. Whether these differences are of nature or nurture they must be acknowledged and controlled for.

In developing a test, accounting for biological differences is a more quantitative task than accounting for cultural differences. For example - adjusting the height of test apparatus when comparing the performance of Japanese versus Anglo-American adults is more easily measured empirically than controlling for the effects of traditional versus western child-rearing practices within the Japanese-American sample.

Manaster and Havighurst (1972) isolated the four cultural differences which most strongly influence test performance. The first is previous experiences with the type of stimulus used, secondly the subject's motivation towards the task, thirdly his experience with the language used and lastly cultural developmental differences. Davidson and Lang (1960) stated that it was impossible to control for all these variables in any one study and because of this, "functional score equivalence" could rarely be achieved. They felt that it was invalid to compare group scores unless two levels of criteria are met. Often the quantitative scores are similar and comparisons are made without determining that the scores represent the characteristic in each culture, the test may have tapped separate aspects of the same concept.

Ortar (1963) examined various forms of assessment stimuli and concluded that within the different methods there was a hierarchy of culture fairness. She rated pictures and models as the most culture-bound followed by abstract performance materials, then abstract paper and pencil tests, then language materials and concluded that the most culture fair method was number materials.

As well as the variables surrounding the test itself the experimenter may elicit anything from a social-desirability bias to a "sucker" bias in his subjects (Brislin,

Lonner and Thorndike, 1973). All in all, Brislin et al. concluded that cross-cultural research had earned a less than shining reputation with a general textbook consensus that "culture fairness has run its course or never really existed" (p. 109).

Self-Concept Instruments - The Present Study

The assessment of self-concept to date has received much criticism and little praise (Samuels, 1977; Wylie, 1974). Yamamoto (1972) has cited four major reasons for the present state of research into self-perceptions. The first problem is the lack of valid comparisons that have been made between assessment procedures. This is directly linked to the second problem - there is no empirically acceptable definition of "self-concept" per se. With this lack comes the third problem - undefined parameters which make sampling validity difficult. The last obstacle involves the human element. Given that a researcher has successfully defined the construct of self-concept for his use and he has defined his population - can he be sure that the recorded response is a reflection of self or is it simply a defensive response set? Sears and Sherman (1964) stated that "there is no other criterion for the self-concept than what the subject himself says under favourable conditions" (p. 13).

Too many researchers are confronted with the multiplicity of self-concept and refuse to admit that the concept is not entirely tangible and capable of empirical definition. They instead dogmatically define the construct and adjust their scope accordingly. Often a measure of "self-esteem" is chosen for use with two cultures which is diametrically opposed to the values in one. Allowances are not made, and conclusions are drawn treating the two sets of data as valid equals.

For instance, the Coopersmith Self-Esteem Inventory contains items which are scored positively for the white culture but would be negatively sanctioned in the Indian realm (Lefley, 1975; Cress, 1974). Despite this, the measure continues to be used for Indian-white comparisons (Burnap, 1972; Martin, 1978). The inventory may appraise white self-esteem in an Indian sample. Lefley (1975) cited a correlation of zero between the Coopersmith behaviour rating scale and native self-report.

Coupled with the indefinite connotation of the construct of self-concept the cultural inadequacy of many items makes conclusive research difficult. Manaster and Havighurst (1972) suggested that because most studies use only one measure of self-concept "the researcher is left with measures from one instrument which has face validity but may also be measuring other things as well as the

self-concept" (p. 57).

Zirkel and Gable (1977) conducted one of the few studies investigating the reliability and validity of separate self-concept measures using three different ethnic groups. Using the Coopersmith Self-Esteem Inventory (short form), the Primary Self-Concept Scale (PSCS), the Self Social Symbols Tasks (SSST), the Behavior Rating Form (BRF), and a Teacher Rating Scale (TRS) they investigated test-retest reliability and convergent validity. They found all measures except the SSST to be "somewhat stable" (p. 51) over time but low convergent validity for all of the self-report instruments. The greatest convergence of indicators was between the SEI and the PSCS where r ranged between .21 and .49 on the first testing session (the higher intercorrelations were for the white subjects).

For these reasons of self-concept definition problems, validity, reliability and cultural inadequacy, the present study proposes to use three separate measures of self-perception - the Coopersmith Self-Esteem Inventory, the Primary Self-Concept Inventory and a semantic differential technique specifically constructed for this study.

The Coopersmith Self-Esteem Inventory. The Coopersmith is an attitude inventory which was designed to measure self-esteem in children aged nine to adult. It has been used cross-culturally (Martin, 1978; Burnap, 1972)

and has been criticized in this capacity (Lefley, 1975; Cress, 1974). It was chosen for the present study firstly to investigate its capacity in comparison to the other measures; secondly as representing a verbal assessment technique and lastly, to examine its possible culture biases.

Coopersmith has defined self-esteem as a "personal judgement of worthiness" (p. 5) which remains constant over several years and is associated with "effective functioning" (Coopersmith, 1967). He feels that preadolescent self-esteem is a general construct which is minimally affected by proficiency in varied areas and that if separate experiences are weighted they are done so relative to a previously established self-concept.

Despite his belief in a general concept of self, factor analysis has broken the scale into general self, social-self-peers, home-parents, social-academic and a lie scale. The Form A for children aged 9-15 (see Appendix A) contains a number of items which represent non-native values. For example, item No. 7 - "I find it very hard to talk in front of the class" represents a middle-class white value of competent public speaking, the ability to verbalize in front of groups. The Indian culture does not hold this value, an Indian child is not expected or required to contribute meaningful conversation and especially not in

front of a gathering. Item No. 28 "I like to be called on in class" and Item No. 48 "If I have something to say, I usually say it" are both similar in this respect. The former statement subscribes to being singled out, a state which is foreign to Indian children. The latter statement awards speaking up and voicing opinions which is also not condoned for Indian youth. Item No. 22 "I give in very easily" is scored negatively for the competitive motivation as opposed to the cooperative motivation which is still valued in so many native cultures. Other items concerning public speaking, parental relationships and social relationships appear biased towards white values and may elicit low scores from a native child who maintains traditional systems.

Burnap (1972) used the Coopersmith with Indian and white schoolchildren in grades four through eight. She found no real race differences, but sex differences in grades four, five and eight (females higher in grade four, males in grades five and eight). Previous research linking the Coopersmith and academic achievement indicated a low but positive correlation for fifth graders (Campbell, 1967). Coopersmith himself concluded that "ability and academic performance are significantly associated with feelings of personal worth" but are not "major and overwhelming influences" (p. 129).

The Primary Self-Concept Inventory. The PSCI is a measure using "dichotomous pictorial stimuli" to assess "self-concept factors relevant to school success" (Johnson, 1976, p. 709). It was chosen for the present study for three reasons. Firstly, the instrument is non-verbal. The instructions are read aloud and the student has only to circle a picture for his response. Secondly, the instrument has previously found few ethnic differences in self-concept (Martig and de Blaissie, 1973). Thirdly, it is one of the few measures which is specifically oriented to academic self-concept.

The Semantic Differential. Rationale for the Test Formulation. According to Brislin et al. (1973) the semantic differential is the "most common single method of measurement to be found in published cross-cultural research" (p. 243). The technique provides redundancy in a semi-direct method that allows and compensates for subjects with reading problems or a reticence to express opinions (Manaster and Havighurst, 1972). The semantic differential test format and administration is straightforward and constant but the concepts involved vary with the areas of interest.

Previous self-esteem research (Clifton, 1975; Weisberger, 1972; Dreyer and Havighurst, 1970) has used concepts such as "myself", "my future self", or "my ideal self" and

evaluated them with adjective pairs (good-bad, nice-awful, etc.). The adjectives chosen for these studies have been of a more general self-appraisal nature than is proposed for the present work. If, as McGuire and Padawer-Singer (1976) found, only 15% of a child's self-regard concerns school then an instrument which hopes to tap this area must concentrate more exclusively on academic interests. These researchers supported a "situational" view of self-concept which is lost in traditional reactive methods.

In fact, however, if one examines some of the more traditional tests, such as the Piers-Harris Children's Self-Concept Scale, (Piers, 1969), The Sear's Self-Concept Scale, (Sears, 1966), or Gordon's "How I see Myself" scale, (Gordon, 1968) many of them are based on previously collected children's statements. These measures have used an informal adaptation of McGuire's "tell us about yourself" and compiled areas of concern into a different test format. Winne and Marx (1977) found that each of the aforementioned tests covered three major aspects of the self - physical self, social interaction and academic performance and attitude. They concluded that the construct of self was composite, "structured like a daisy" (p. 900) with petals which assumed relative importance when compared to other attributes.

Ideally then, to accurately measure academic self-regard one would want to tap those areas of interest specific to the school situation, assign values to these areas and compare the range of students using a previously verified method such as the semantic differential. An appropriate measure would combine the spontaneity of a twenty statements "tell us about yourself" test with the semi-rigid method of pre-defined semantic spaces.

The "ECHO technique" (Barthol and deMille, 1969) is a means of quantifying spontaneous values and interests. This method compiles salient interests to form group-inherent belief systems. Cross-culturally, Havighurst and Neugarten (1954) used the ECHO-based Bavelas Moral Ideology Test (1942) to compare value networks within American Indian and white groups. Barthol and deMille concluded that "ECHO is recommended as an economical and convenient technique for describing the value-and-influence patterns in familiar and unfamiliar populations, foreign or domestic" (p. 68).

The Test Formulation. The ECHO technique involves composing questions relevant to the area of interest. For the Moral Ideology Test (Bavelas, 1942) the children were asked for seven "good things to do" and seven "bad things to do" as well as for a figure of approval or disapproval of each act. Specifically, "who would praise him(her) and be pleased?" or "who would blame him (her) or think badly of

him (her)?" Barthol and deMille (1969) concluded that if an activity was mentioned by 80% of the respondents then that activity was representative of the sample. They assumed not that the other 20% did not participate in this activity, simply that they did not think of it when questioned. They also concluded that a random sample of 15-20 subjects "accurately reflected the value hierarchy of a total sample of 100-200" (p. 46).

Havighurst and Neugarten (1954) found high test-retest reliability with their sample and Barthol and deMille (1969) suggested that concurrent validity is easily proven by giving a sample their own value list as well as that of another group to see which they choose. They also stated that while earlier work used ten repetitions of each question, seven were just as accurate a reflection of the value hierarchy. Once these responses are categorized and the hierarchy is formed by response frequency not only are belief system comparisons available but sources of influence are quantifiable as well. The chosen approvers and disapprovers ranged from the immediate to the removed reference group in the Havighurst and Neugarten study. They found that the teacher as a "moral surrogate" was important to the white students but not to the native children.

Preliminary Study. The present study used the "ECHO" technique to investigate an academic value hier-

archy with its corresponding sources of influence for matched groups of Indians and white students. This investigation took the form of a preliminary study in order to gather information for the proposed semantic differential instrument. As well as questioning each group concerning "good" and "bad" school behaviour, home behaviour was also examined.

Previous research has found self-perceptions to be situational. Salient responses in the school setting are often not duplicated in the context of a child's home (McGuire and Padawer-Singer, 1976). Assuming that this "situational" theory has merit, a child who is asked about home life while in school may structure his answers accordingly. In other words, the questions may be more likely to elicit home-school relationships than if the survey was conducted in another context.

Once the most salient positive and negative values of academic and home life were categorized for each group they were presented to the experimental group as an inventory using the semantic differential format. This inventory, labelled the "Moral Self-Perception Inventory (MSPI) asked the children to classify as "like me" or "unlike me" a list of values drawn equally from the white and Indian samples (see Appendix I).

The Statement of the Hypotheses

The Preliminary Study - The Moral Self-Perception Inventory

1. There will be significant culture differences in both the home and school categories generated.
2. There will be significant culture differences in the "approvers" and "disapprovers" cited for the listed behaviours.

The Main Study - Self-Esteem

The Coopersmith Self-Esteem Inventory

1. The white group will have higher overall scores than the Indian group.
2. There will be specific items on the Coopersmith which will consistently elicit negative scores from the Indian students.

The Primary Self-Concept Inventory (PSCI)

3. There will be insignificant culture differences on this measure.

The Moral Self-Perception Inventory (MSPI)

4. There will be insignificant culture differences on this measure.

Self-Esteem and Academic Achievement

5. The Coopersmith and the PSCI will be positively related to academic achievement.

6. Both the home and school scores from the Moral Self-Perception Inventory will correlate positively with academic achievement for the white group.
7. Only the school value scores will correlate positively with academic achievement for the Indian group.

CHAPTER II

PRELIMINARY INVESTIGATION

The Construction of the Moral Self-Perception Inventory (ECHO Technique)

Subjects

The subjects were 43 students from an elementary school in Duncan, B.C. There were 9 grade four, 13 grade five and 22 grade six children (21 males and 22 females, 22 Indians and 21 whites). One combined grade four and five class (mean age 10.6 years) and one combined grade six class (mean age 11.98 years) were used. All children present in these classes on the day of testing were used.

Instruments and Procedure

Each child was given 20 cards (four sets of five identical cards). Each set of cards was printed on a different colour of paper and asked the child a different question concerning "good" and "bad" things to do. Two questions were general and two referred specifically to school. The reverse of each card also contained a question concerning approval or disapproval of the cited behaviour (see Appendix B for a complete explanation of the questions).

The cards were distributed by the experimenter in the students' regular classrooms. Both groups received identical instructions concerning the cards (see Appendix C) but some individual help was needed in the grade four/five class.

Results and Analysis

The Number of Responses. The cards were first sorted by grade, culture and sex. The mean number of responses for each group were compared (see Appendix D for group means). There were overall culture differences, the white students completed more cards of each set than the Indian students ($x^2(1) = 43.31$, $p < .001$).

The "Approvers" and "Disapprovers" - Appraisers. The cards were then sorted on the basis of the appraisers of the behaviours given for each question. The absolute frequency for each of these appraisers was noted and categories were compiled using the boundaries suggested by the nature of the responses. In all, 23 categories of "approvers" and "disapprovers" appeared (see Appendix E). There were slightly more categories used for the "general" questions than for the "school" questions ($x^2(1) = 4.35$, $p < .05$), and parents ("father," "mother," "parents") were chosen most often for these general questions ($x^2(1) = 88.87$, $p < .001$) while teachers ("principal," "teacher,"

"principal and teacher") were chosen for the school questions ($x^2(1) = 158.53$, $p < .001$).

The younger students cited teachers as appraisers more often than did the older group ($x^2(1) = 25.46$, $p < .001$). The older group used "me" more often than the younger group ($x^2(1) = 11.37$, $p < .001$) and the whites used "me" more often than the Indians ($x^2(1) = 9.53$, $p < .001$) as appraisers. The whites also used "everyone" more often than the Indians, ($x^2(1) = 20.57$, $p < .001$) while the Indians chose their extended family more often than whites ($x^2(1) = 11.77$, $p < .001$). The Indians tended to choose teachers more than the whites ($x^2(1) = 6.85$, $p < .001$) and were also more likely to chose parents as appraisers of school-related behaviours than were the whites ($x^2(1) = 5.83$, $p < .02$).

The Categories of Behaviours. The responses were then sorted on the basis of the behaviours cited for each of the four separate questions by the experimenter and by five external judges (see Appendix F for complete explanation). This sorting resulted in 18 major categories, 10 of which had opposites resulting in a total of 28 categories (see Appendix G for list).

Categories with only two or three responses were then collapsed and combined into "miscellaneous" in order to isolate the most salient categories for each culture.

Ordering the categories by frequency of response resulted in two or three salient categories for each group for each question. The questions were compared along the dimensions of culture, sex and age using the three largest categories.

There were significant culture differences in the number of school-oriented responses given to the general questions, $x^2(1) = 23.41$, $p < .001$ (Indians higher). There were also culture differences in "good things" to do at school, Indians were more likely to chose chores while whites chose being considerate or improving their work ($x^2(1) = 12.7$, $p < .001$).

Males of both age groups cited recreational activities more often than females for general behaviours ($x^2(1) = 13.86$, $p < .001$). In school males cited property damage as a bad thing to do ($x^2(1) = 6.96$, $p < .01$) and females chose helping behaviour as a good thing to do ($x^2(1) = 10.28$, $p < .01$).

Discussion

The results of the ECHO study illustrate that for this sample of Indian and white school children there are significant differences in acceptable and unacceptable behaviours as well as differences in the people who would condone or object to these actions.

The categorial differences were not as marked as expected. The Indian children may feel a sharper division between home and school and therefore orient their general responses towards school simply because of the testing situation. This may again reflect a level of emotional maturity as the difference was larger with the younger group.

The original hypotheses for the major study included one hypothesis concerning "school" and "home" scores on the proposed semantic differential instrument. The nature of the ECHO responses gathered was such that two separate subscales would be impossible. The categorical differences for the two cultures were not broad enough to construct the two subscales with sufficient validity.

The culture difference in "good things" to do at school is interesting. While the white children seem more oriented towards their grades and social graces the Indians perceive classroom chores as being more important. The sex differences found in the present study seem to reflect stereotypic sex roles. The males valued recreational activities more highly and the females stressed social skills (see Appendix H for a more complete discussion of the findings).

The nature of the ECHO responses gathered does not suggest values of personal worth as much as a representative moral ideology. Many questions can be raised concerning the values elicited and their bases but in the final analysis it is the applicability of the data as much as its inherent worth. For example, whether the adjective "good" in the questions is interpreted by the children as meaning a behaviour that is obedient or one that is fun is debatable. The issue in point is that the items produced are a product of the population under study and if they exhibit some sort of meaningful correlation with achievement then this type of survey may prove a useful predictive measure in education.

The Construction of the Moral Self-Perception Inventory

In order to choose the most salient values from each of the four questions for each culture the three largest categories (in terms of frequency of response) were examined. In some cases the cultures had conflicting categories and in some cases the values were the same. The conflicting categories supplied the culture-specific test items and the similar categories formed the core of the instrument. However, the discrepant categories were not uniformly distributed across the four questions. For example, one question might provide two Indian-specific categories, one

white-specific category and two categories of behaviour that were common to both cultures. Using this formula of examining the culture contrasts and similarities resulted in a list of six white values, five Indian values and six values that were common to both groups for a total of 17 values. For example, when asked for a "good thing to do at school" both cultures stated that it was important to "do work" but there were culture-specific responses as well. "Helping with chores" was a salient Indian value while "improving schoolwork" and "being nice to others" were frequent white responses (see Appendix I for a complete list).

Each of these 17 values was taken and translated into two self-descriptive statements representing two opposing views. The actual statements given by the children were used wherever possible. Where certain values seemed especially salient extra items were inserted to investigate their weight. This practice resulted in four extra test items (see Appendix J), one Indian-specific value and three general items.

The total 21 sets of statements were then randomly ordered in a semantic differential format using a scale of five spaces[1] and the two ends of the continuum (good and bad)

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[1]Many previous instruments have used a seven-point scale but five points were chosen for the present study because of the age range of the sample.

were systematically alternated. The 21 test items were preceded by two unrelated sample items (see Appendix K) to ensure that the children understood the task before attempting the actual instrument.

CHAPTER III

THE MAIN STUDY

Method

Subjects

The subjects were 99 elementary school pupils from an integrated public school in Duncan, British Columbia. The sample included 46 whites and 53 Indians, 54 females and 45 males. There were 34 grade four, 35 grade five and 30 grade six children. Their mean ages were, respectively, 9.67, 10.77 and 12.0 years.

The Materials

Each group received the Coopersmith Self-Esteem Inventory Form A, the Primary Self-Concept Inventory (PSCI) and the Moral Self-Perception Inventory (MSPI) constructed for the present study.

Procedure

The Three Test Instruments. The tests were administered over three consecutive days of testing. Each class received the PSCI on the first day, the MSPI on the second and the Coopersmith on the last day. All students present in the classes on the days of testing participated. Those

students who were absent for one of the two first two measures made up their missing test on the last day.

All three tests were administered by the experimenter separately to each class in their open-plan class groups. The instructions concerning the tests were the same for each group. Each testing session was preceded by assurances that the childrens' responses would be confidential. The PSCI was administered using the prescribed introduction in the test manual, the MSPI was administered with its previously formulated procedure (see Appendix L) and the Coopersmith was given little introduction except to ensure that the students understood the task.

Academic Achievement. Individual achievement scores were obtained by teacher ratings. Each teacher was asked to rate their students' performance purely on academic expertise (see Appendix M) and to assign each child to one of four levels of achievement.

CHAPTER IV

Results

The Major Investigation

There were seven hypotheses made concerning the results of the major investigation of the study. Of these, two became impossible to investigate due to the results of the pilot study. The sixth and seventh hypotheses involved "home" and "academic" subscale scores on the Moral Self-Perception Inventory (MSPI). The nature of the ECHO responses did not make the construction of these scales feasible (see Preliminary Study, p. 53) and therefore the last two hypotheses cannot be dealt with.

A primary analysis of the results (concerning the major hypotheses) was conducted using three statistical methods: a multivariate analysis of variance was run on the three test instruments using the factors of culture, sex and grade; Pearson Product Moment Correlations were run between the instruments and the Academic Achievement ratings for both cultures (see Appendix N for correlation matrices) and chi-squares were used to compare differences within the test instrument.

All the scores on the Primary Self-Concept Inventory (PSCI) and the Moral Self-Perception Inventory (MSPI)

which were collected on the third day of testing (due to absenteeism on the first two days) were examined separately before being included in the analysis. It was thought that these scores (10 PSCI and 8 MSPI) may have deviated too strongly from the group mean due to their special testing situation. The means and standard deviations for the main sample and for the scores collected on the third day of testing were calculated for each test instrument and compared. There was no significant difference between the two distributions of Primary Self Concept Inventory scores but there was a difference between the two Moral Self-Perception Inventory distributions. This difference was attributed to one extremely discrepant score. An equally discrepant score was found in the larger main sample and rather than disqualify certain scores using a pre-determined criteria it was decided to include all scores.[2]

The Three Test Instruments. The Primary Self-Concept Inventory. There were 92 primary Self-Concept Inventories completed, 33 grade four, 32 grade five and 27 grade six. This sample included 47 Indians and 45 whites, 52 females and 40 males (see Table I for a list of means).

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[2]Due to absenteeism 16 children had missing score values. These missing scores resulted in a conservative multivariate analysis which only included those students with complete profiles (n=83). For example, a one-way analysis of variance on the effect of culture on the Coopersmith scores using all scores (n=90) resulted in a larger F value ($F(1,88)=22.58$, $p<.001$) than given with the MANOVA analysis ($F(1,71)=18.42$, $p<.001$).

Table I

Mean Scores By Culture, Sex and Grade on the Primary Self-Concept Inventory

		4	5	6	Total
	Male	11.00	12.00	13.4	12.07
Indian					
	Female	15.63	16.00	13.55	15.15 *
	Male	13.66	12.69	14.50	13.50
White					
	Female	15.00	14.87	14.66	14.89 *
Total		14.45	14.00	14.00	14.16

* Significantly different from males, $F(1,71) = 17.80$, $p < .001$.

The Moral Self-Perception Inventory. There were 96 Moral Self-Perception Inventories completed, 32 grade four, 34 grade five and 30 grade six. This sample included 50 Indians and 46 whites, 54 females and 42 males (see Table II for a list of means).

The Coopersmith Self-Esteem Inventory. There were 90 Coopersmith Self-Esteem Inventories completed, 32 grade four, 30 grade five and 28 grade six. This sample included 46 Indians and 44 whites, 48 females and 42 males (see Table III for a complete list of means).

Academic Achievement. All children (n = 99) were given academic achievement ratings by their teachers. On the scale from one to four (one = poor, two = satisfactory, three = good, four = very good) the overall mean was 2.16 (see Table IV for a complete list of means).

Hypothesis One. The whites will have higher overall Coopersmith scores than the Indians. The MANOVA showed an effect of culture on the Coopersmith, the whites had significantly higher overall scores, $F(1,71) = 18.42$, $p < .001$.

Hypothesis Two. There will be specific items on the Coopersmith which will consistently elicit negative scores from the Indian students (see Appendix A).

Table II

Mean Scores by Culture, Sex and Grade on the Moral Self-Perception Inventory

		4	5	6	Total
Indian	Male	21.20	18.50	14.33	17.40
	Female	28.94	29.66	17.90	25.97 *
White	Male	25.67	23.00	19.09	21.70
	Female	27.25	28.50	25.00	27.42 *
Total		26.84	25.53**	18.33**	23.56

* Significantly different from males, $F(1,71) = 10.64$, $p < .002$.

** Significant grade difference, $F(2,71) = 6.40$, $p < .003$.

Table III

Mean Scores on the Coopersmith Self-Esteem Inventory
By Culture, Sex and Grade

		4	5	6	Total
	Male	50.29	50.00	62.67	54.88
Indian					
	Female	61.60	60.00	52.63	58.83
	Male	68.67	78.00	68.73	73.00 *
White					
	Female	68.57	72.00	72.67	70.78 *
Total		61.31	60.40	63.25	64.61

* Significantly different from the Indians, $F(1,71) = 18.42$, $p < .001$.

Table IV

Mean Academic Achievement Ratings
By Culture, Sex and Grade

		4	5	6	Total
Indian	Male	1.29	1.40	1.17	1.28
	Female	1.88	1.78	1.40	1.71
White	Male	4.00	2.85	2.45	2.81*
	Female	3.00	3.00	2.33	2.89*
Total		2.20	2.40	1.80	2.16

* Significantly different from the Indians, $p < .001$.

Items No. 7, 22, 28 and 45 on the Coopersmith (see Appendix A) were taken and analyzed separately to represent items with culture bias (see Introduction, p. 40. These four items were answered negatively by a significantly larger number of Indian children than white ($x^2(1) = 11.79$, $p < .001$).

Hypothesis Three. There will be insignificant culture differences on the Primary Self-Concept Inventory.

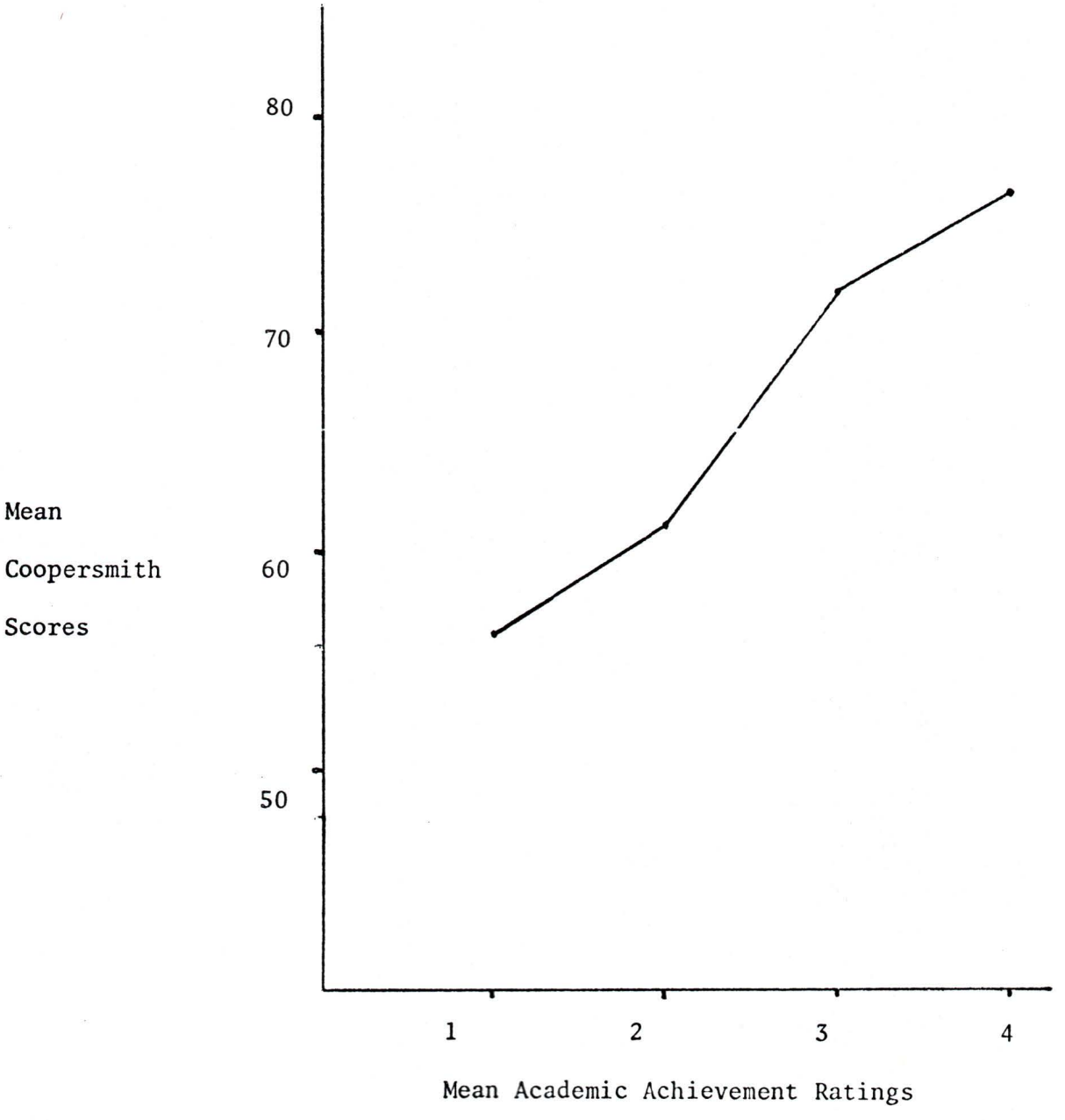
The MANOVA showed no significant culture differences on the PSCI.

Hypothesis Four. There will be insignificant culture differences on the Moral Self-Perception Inventory. The MANOVA showed no significant culture differences on the MSPI

Hypothesis Five. The Coopersmith and the Primary Self-Concept Inventory will be positively related to academic achievement.

Of the three tests only the scores on the Coopersmith were positively correlated with achievement ($r = .45$, $p < .001$). A one-way analysis of variance showed significant differences between the Coopersmith scores at each of the four academic achievement rating levels (poor, satisfactory, good, very good) $F(3,86) = 7.98$, $p < .0001$, and the relationship does appear to be linear (see Figure II).

Figure II. The Relationship Between Coopersmith Scores and Academic Achievement



When the correlations between the three test instruments and academic achievement were investigated separately for the two cultures, differential significant effects were found. The Coopersmith was significantly correlated with academic achievement for the whites only, $r = .26$, $p < .05$ (see Figure III) and the other two measures, the PSCI and the MSPI were only significantly correlated with achievement for the Indians ($r = .24$, $p < .05$ (see Figure IV) and $r = .34$, $p < .008$, respectively (see Figure V)).

The Secondary Investigation

Due to the scope of the data gathered and the nature of the results related to the hypothetical outcomes a number of secondary investigations were undertaken and examined.

The Three Test Instruments. The scores on the three test instruments (the PSCI, the MSPI and the Coopersmith) showed a significant positive correlation with each other. With both cultures combined, the correlation between the PSCI and the MSPI was $r = .39$, $p < .001$. Taking the two cultures separately, for the whites the correlation dropped to $r = .27$, $p < .03$ and for the Indians it rose to $r = .45$, $p < .001$. Between the PSCI and the Coopersmith, with both cultures combined, the correlation was $r = .36$, $p < .001$. Taking the two cultures separately, the correlation for the

Figure III. The Relationship Between Coopersmith Scores and Academic Achievement by Grade, Sex and Culture

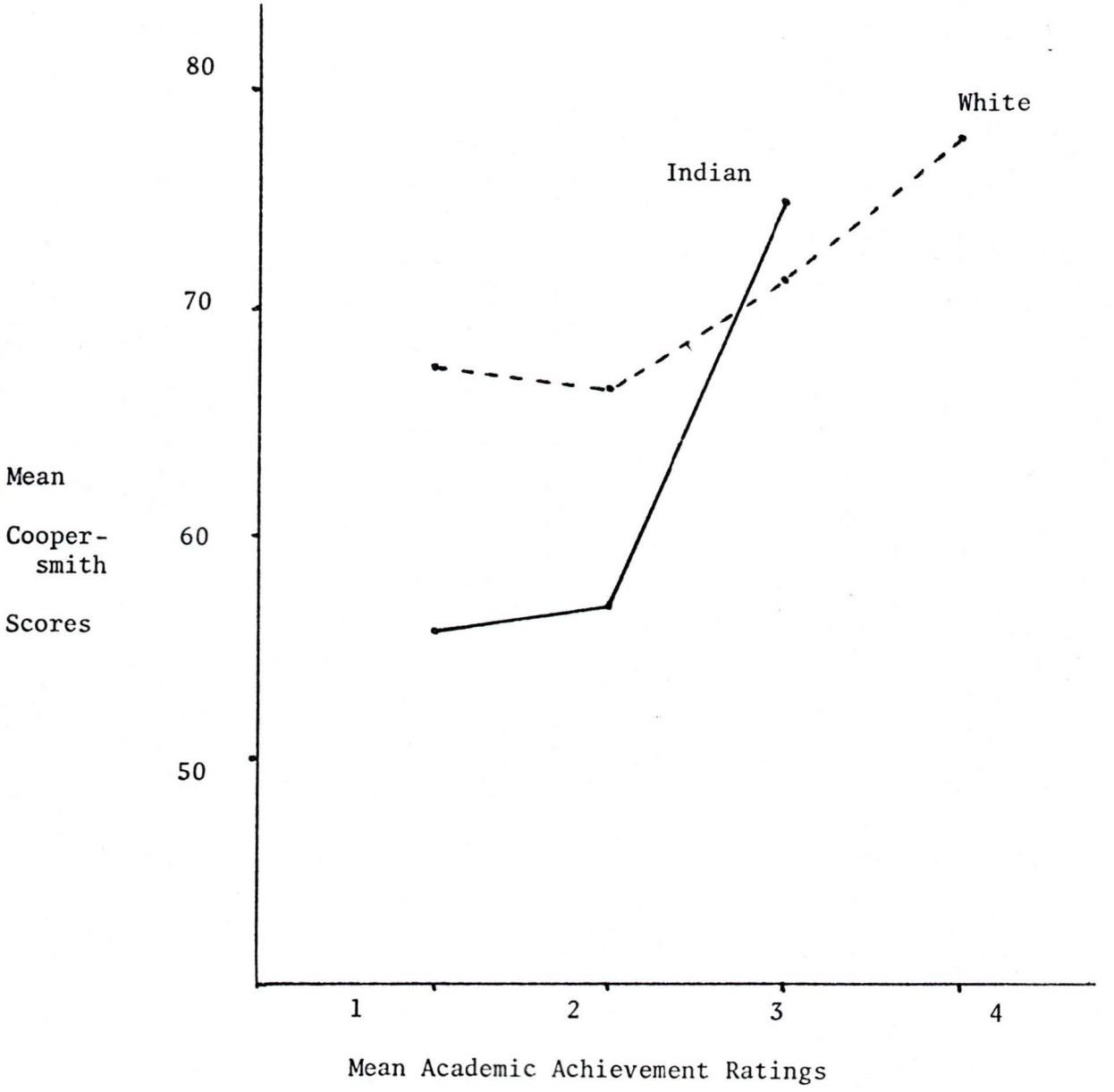


Figure IV: The Relationship Between PSCI Scores and Academic Achievement By Culture

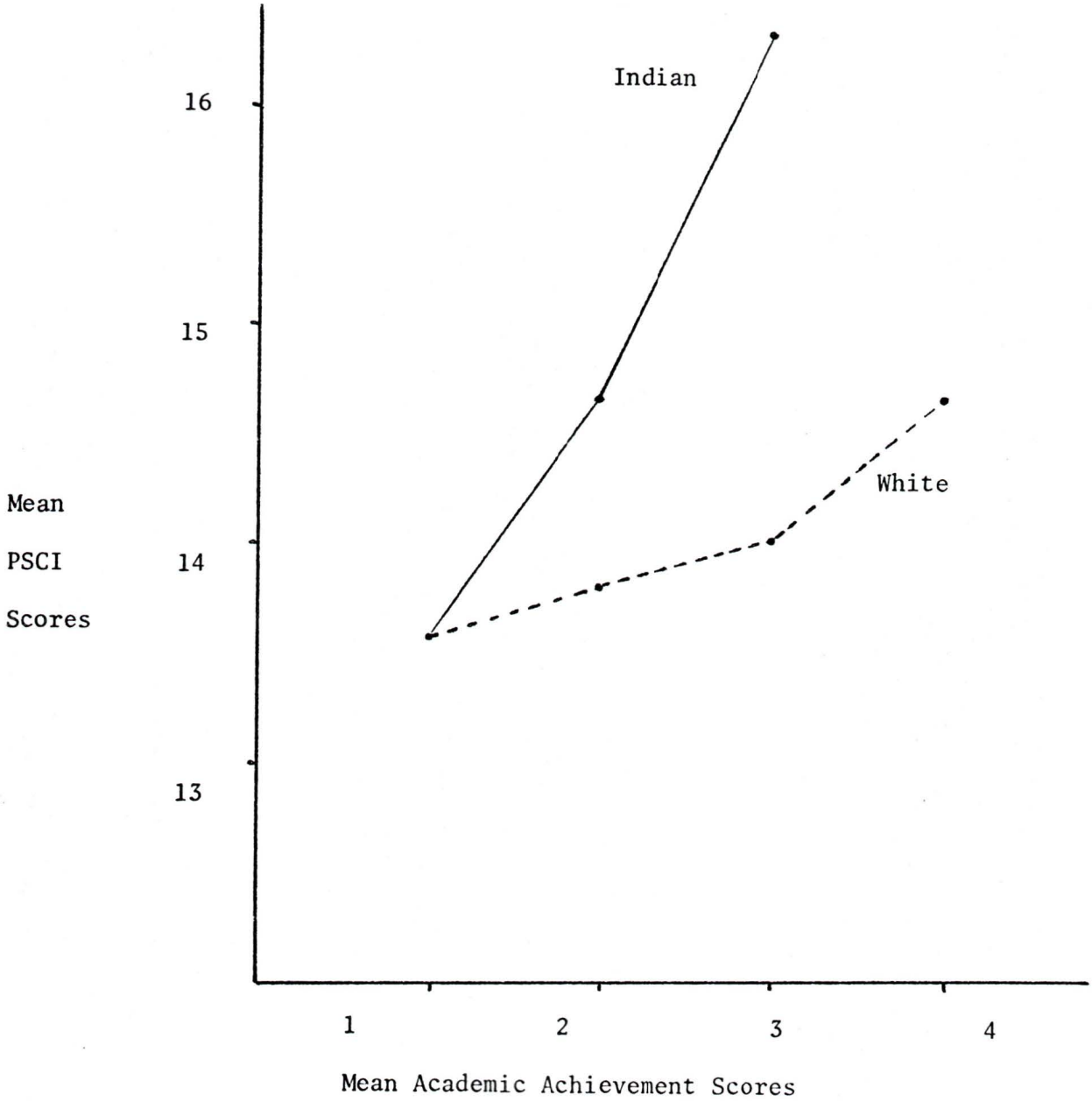
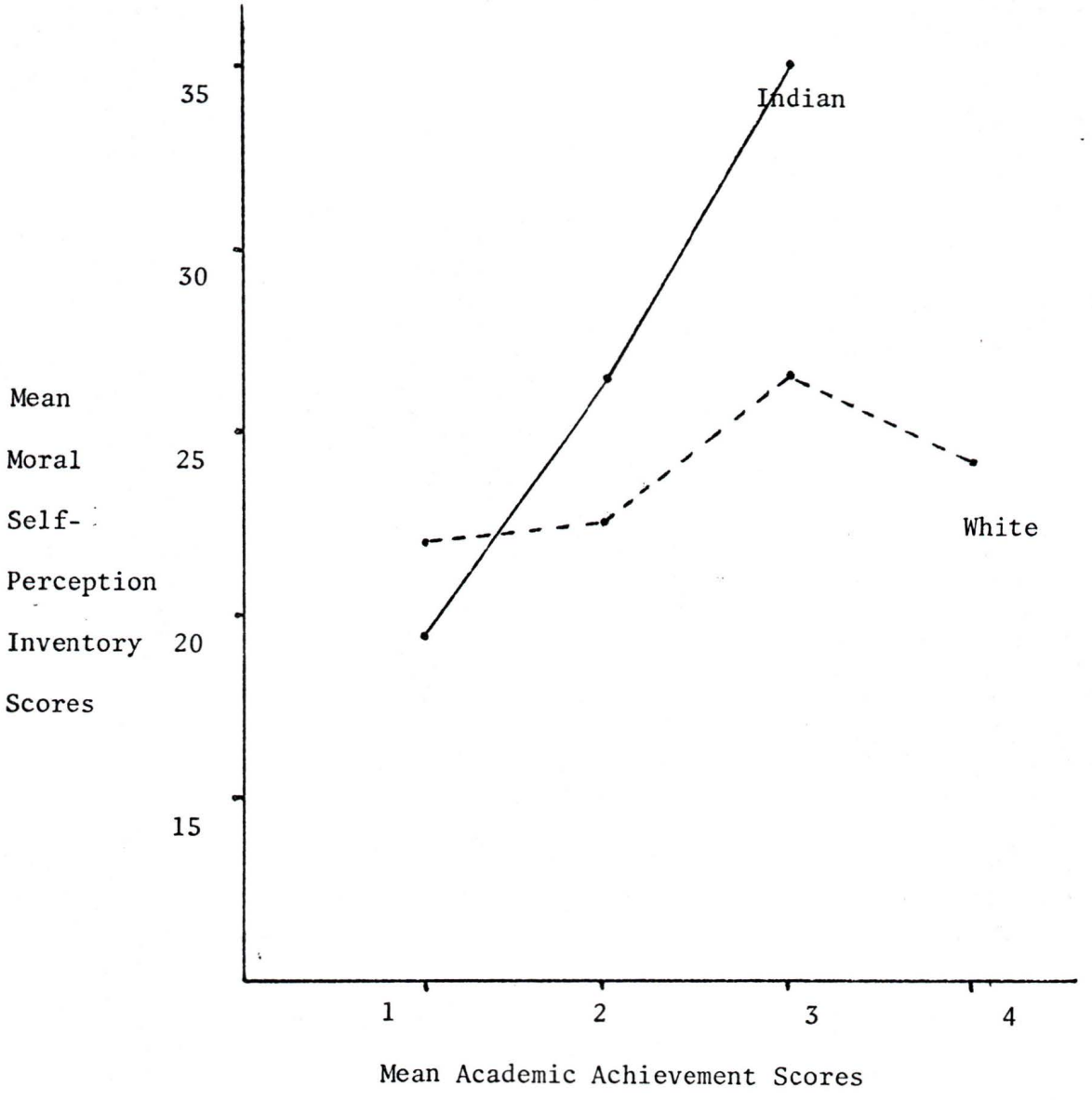


Figure V: The Relationship Between Moral Self-Perception Inventory Scores and Academic Achievement by Culture



whites was $r = .40$, $p < .005$ and for the Indians it was $r = .44$, $p < .002$. Between the MSPI and the Coopersmith, with both cultures combined the correlation was $r = .32$, $p < .001$, and there were no culture differences in this correlation (see Appendix N for the complete matrices).

The only variable measured in the present study with which all three tests correlated positively was the Coopersmith academic subscale. The PSCI and the Coopersmith (minus the academic score) were both significantly correlated with the academic subscale with no culture differences ($r = .32$, $p < .001$ and $r = .68$, $p < .001$). The MSPI was differentially correlated with this subscale for the two cultures. With both cultures combined the correlation was $r = .29$, $p < .001$. Taken separately, the Indian correlation was not significant and the white correlation rose to $r = .30$, $p < .005$.

Sex and Grade. The present study did not venture any hypotheses concerning differential effects of the two factors of sex and grade. The MANOVA showed that these factors did contribute to the variance in the test scores. As well as the significant effect of culture on the Coopersmith there were significant effects of sex for both the PSCI ($F(1,71) = 17.80$, $p < .001$) and the MSPI ($F(1,71) = 10.64$, $p < .002$) in both cases the females' scores were higher. There was also an effect of grade for the MSPI

$f(2,71) = 6.40$, $p < .003$ (younger grades higher) and a grade x sex interaction on the PSCI, $F(2,71) = 4.21$, $p < .01$ (see Figure VI).

The Moral Self-Perception Inventory "Extra Items." There were varied culture differences on the four extra items of the MSPI. Item No. 12 "I think about school a lot when I'm at home" produced no significant differences between cultures. Item No. 10 "I think that I obey more people than just my family" and its reverse produced slight culture effects. The whites were more likely to look outside their family for permission than the Indians (x^2 (1) = 5.00, $p < .05$).

There were also significant culture differences on Item No. 15 "I think it is worse to smash windows or break something than fight." The Indians were more concerned with fighting and the whites were more concerned with property damage (x^2 (1) = 9.08, $p < .01$). The last item "Helping the teacher clean up the class is one of the most important things in school" also generated an effect of culture. The Indians were more likely than the whites to feel that helping the teacher clean up was one of the most important things in school (x^2 (1) = 10.33, $p < .01$).

The Coopersmith Subscales. Two subscale scores on the Coopersmith were examined, the lie scale score and the academic scale score (see Table V for a list of means).

Figure VI: Mean Primary Self-Concept Inventory Scores by Grade, Sex and Culture

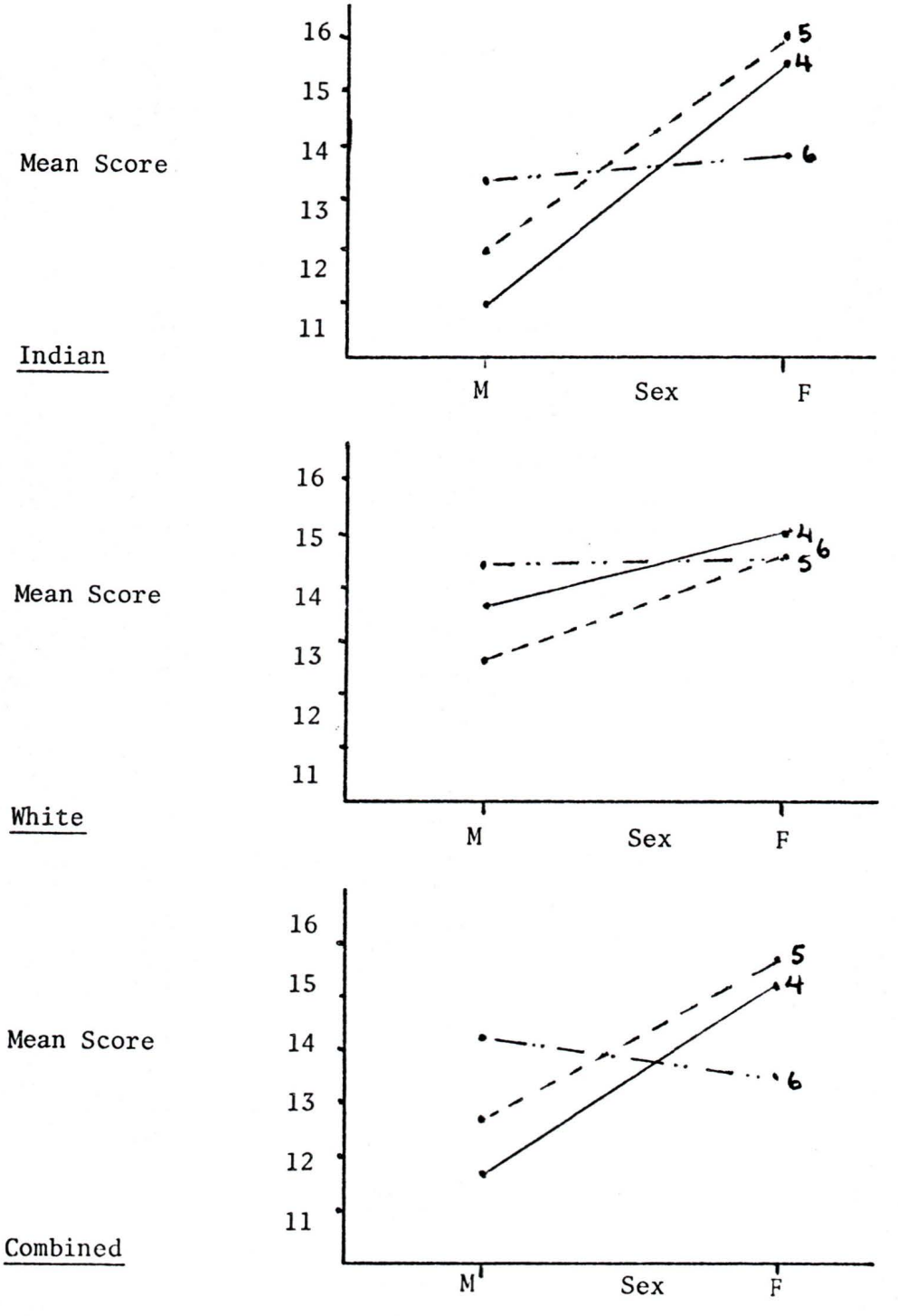


Table V

Coopersmith Lie and Academic Subscale Mean Scores by Culture, Sex and Grade

Liescore

		4	5	6	Total
	Male	4.57	4.33	4.50	4.50
Indian					
	Female	4.80	5.57	4.00	4.77 ***
	Male	3.33	3.17	2.00	2.69 ***/
White					
	Female	3.00	3.00	4.00	3.17 ***/ ****
Total		4.23	3.80 *	3.32 *	3.80

Academic

		4	5	6	Total
	Male	5.00	3.00	4.33	4.38
Indian					
	Female	4.93	5.14	3.50	4.60
	Male	3.33	5.58	4.54	4.88
White					
	Female	5.43	5.88	4.00	5.38
Total		4.90	5.30 **	4.14**	4.80

* Significant grade differences, $p < .05$.
** Significant grade differences, $p < .01$.
*** Significant sex differences, $p < .01$.
**** Significant culture differences, $p < .001$.

There were significant grade differences on both these subscales, the younger grades had higher lie scores (x^2 (2) = 6.03, $p < .05$) and higher academic scores (x^2 (2) = 10.39, $p < .01$). There were also significant culture and sex differences on the lie scale, females scored higher than males (x^2 (1) = 6.54, $p < .01$) and Indians scored higher than whites (x^2 (1) = 35.13, $p < .001$).

Academic Achievement. There were significant culture differences in the academic achievement ratings obtained by the children, the whites received higher scores than the Indians (x^2 (1) = 39.45, $p < .001$). A regression analysis, using academic achievement as the dependent variable and culture, sex, grade and the test scores as independent variables, illustrated that culture accounted for the greatest variance in the variable of achievement (43.8%). Of the remaining variance grade and then the Coopersmith total and Coopersmith academic subscale scores were the next largest contributors.

CHAPTER V

DISCUSSION

Introduction

The original statement of purpose for the present study (pp. 1-4) proposed three major intentions - to create an instrument to measure academic self-regard for Indian children, to compare this measure to two other existing self-concept instruments and to investigate the relationships between all three of these measures and academic achievement.

The strength of the investigation rests on the assumption that there is an area of a child's self-perception which can be linked to school success. According to Aboud (1979), acceptance of "myself-the-student" is essential for an Indian child's academic success. If "student" and "Indian" are seen as incompatible then "one will be eliminated from the child's self-definition wherever the other is adopted" (p. 1). Assuming that a child's self-concept is multi-faceted, then one might also assume that for each child these separate areas would be weighted differentially. The ECHO preliminary study attempted to dichotomize these hierarchies of thoughts and

behaviours into two separate culture systems.

It has been suggested that the simplicity of a younger child's self-perception leads them to describe themselves in terms of their activities (Baha, 1965; McGuire and Padawer-Singer, 1976; Aboud, 1979). The nature of the ECHO questions used (good and bad things to do) structured the responses gathered towards actual behaviours rather than statements which might have reflected the personality factors involved with school. For an older age group questions of a more personal nature may have been more effective but with the present sample the impersonal "moral" investigation may have been the appropriate investigative method. Triandis (in Brislin et al., 1975) supports this theory by suggesting that the actions and behaviours of an individual are a direct reflection of his inner feelings.

The actual results of the preliminary study have already been discussed extensively in this paper (see Appendix H). The reliability and validity of the Moral Self-Perception Inventory used in the major investigation are a function of the procedure of the preliminary investigation, and they are rooted in the ECHO technique itself.

The reliability of the technique rests on consistency of group response and consistency of response classification (Barthol and deMille, 1969). The present study maintained consistent response classification through the concurring

outside judges. The inter-judge agreement of assignment to category ensured that the statements were classified consistently. Consistency of group response was maintained by using the most representative statements, the largest categories, the most salient responses that these children felt free to report. Barthol and de Mille (1969) suggested that any response mentioned by a large percentage of the population represented a strong value and that those members of the sample who did not mention the value may simply not have thought of it. The format of the semantic differential incorporated appropriate grammar and vocabulary levels by using the statements given by the children and the testing situation reflected the students' academic work environment as closely as possible.

Previous research suggests that the responses generated by the present study would be consistent over time and equally as representative of the target group's beliefs using five question repetitions as a study using more (Havighurst and Neugarten, 1954).

In summary then, the preliminary study sought to isolate different cultural values concerning school and home and create an instrument which would be equally weighted with these values for both the Indian and white cultures. The method did not try to erase cultural biases in the testing situation - instead it sought to duplicate the actual academic environment in which all these children would be expected to perform - "only in a situation of conflict is

the subculture of a minority children a handicap, but the situation occurs regularly in the classroom" (Johnson,1970,p.3).

The Major Investigation

The results of the Coopersmith Self-Esteem Inventory confirmed the first hypothesis. The whites scored significantly higher on this measure than the Indians. This is consistent with some previous findings (Lefley, 1975; Martin, 1978) and inconsistent with others (Aboud, 1979; Burnapp, 1972). It is difficult to compare test results such as the Coopersmith across Indian subcultures. Even if the groups under investigation are from the same region there are a myriad of extraneous variables, ranging from socioeconomic status to level of acculturation, which may be affecting the scores.

Lefley (1975) found that, of the two groups she examined, the more traditional sample scored higher in self-regard than the one which was more acculturated into the white mainstream.

These extraneous variables may confound the results of the investigation of the second hypothesis as well. Four items were chosen on the Coopersmith which exhibited cultural bias in favour of the white majority. Although there were significant Indian-white differences on these items, given a more detailed description of the specific Indian subculture under examination, more items could have been analyzed. For example, in a band where formal education is rejected in favour of traditional subsistence activities,

Item No. 14 "I'm proud of my schoolwork" would be meaningless. Therefore the degree of cultural bias of the Coopersmith may be contingent upon the extent of the traditional values upheld by the native group under study. Or, the lower Coopersmith scores of the present sample may simply represent low "self-esteem" as measured by white society. Speculation on this problem would suggest that further research might examine specific Coopersmith items in relation to specific tribal or band characteristics. The number of items on the Coopersmith exhibiting culture bias (and therefore the relative size of the handicap in positive scoring) may be directly related to the socio-economic status, degree of acculturation or the nature of the traditional values of the group under examination.

The results of the Primary Self-Concept Inventory support the third hypothesis, that there would be insignificant culture differences on this measure. This is consistent with previous Indian-white research using the PSCI (Martig and deBlaissie, 1973) but the means of the present sample appear to be lower than the norm. Muller and Leonetti (1974) state that a total score of 13 or lower indicates "an undesirably low self-concept" and that a large number students should have "very high . . . total scores" (p. 23). The overall mean of the present study was 14.16, not significantly lower, but a point which should be noted.

The results of the Moral Self-Perception Inventory confirmed the fourth hypothesis; there were insignificant culture differences on this measure.

The final hypothesis concerned the third major purpose of the study - to investigate the relationships between all three of the test instruments and academic achievement. It was hypothesized that both the Coopersmith and the PSCI would be positively related to academic achievement.

The results show that culture played a major role in determining the strength of the relationship between all three tests and the academic achievement ratings. The positive relationship between the Coopersmith and academic achievement is consistent with Coopersmith's own philosophy (Coopersmith, 1967), and with previous research using the instrument cross-culturally (Lefley, 1975).

The Primary Self-Concept Inventory (Muller and Leonetti, 1974) is a relatively new instrument with little specific research relating it to school achievement. The authors of the test state that the test "measures self-concept relevant to school success" (p. 3) and also promote the philosophy that "remedial procedures" must be instituted for low self-concept children in order to initiate "adequate learning" (p. 2). The authors do not openly state that theirs is a test which is correlated to achievement, only that it identifies the self-concept factors which are

related to achievement.

For the Indian children there does appear to be a significant positive relationship between PSCI scores and academic achievement (see Figure IV) which is not significant for the white children. Due to the absence of Indians in the highest academic rank it is not clear whether there is a ceiling for this trend or not but it does seem that the PSCI content uses items which are more structured towards school success for the Indians in the present sample than for the whites.

A similar trend is evident for the results of the Moral Self-Perception Inventory (see Figure V). The correlation between test scores and academic achievement is significant for the Indians but not for the whites. It appears that the content of the moral behaviours generated by the ECHO technique represent values which are related to academic achievement for the Indian group and not for the whites. These results suggest that the Indian child combines good moral behaviour with academic achievement (either consciously or not) but the white child does not.

Further research would be necessary to more accurately document the trend, but both these findings (the PSCI and the MSPI)suggest that the two cultures incorporate separate and different personality variables in their achievement at school.

The Secondary Investigations

The results of the correlations between the scores on the three test instruments indicate significant positive relationships. Previous research comparing two of these measures (Zirkel and Gable, 1977) correlated the Coopersmith and the PSCI and found similar results (r ranged from .21 to .49) to the present study.

The sex differences found (females higher) are consistent with the majority of previous Indian-white studies (Lefley, 1975; Martig and deBlaissie, 1973; Baha, 1965). Significent sex differences on the Moral Self-Perception Inventory were unexpected. Firstly, the construction of the instrument from the ECHO responses attempted to control for sex-specific statements. Secondly, the moralistic as opposed to personal nature of the responses did not suggest that the usual "self-esteem" categories of variable differences would be discovered. The higher female scores seem to fit the stereotypic role of a greater female concern for social approval. Either the girls in the present sample are more morally conforming than the boys or their tendency towards responses of social desirability is greater.

Significant grade level differences were also not hypothesized for the MSPI. Previous research suggests that self-concept in native schoolchildren does decline with

age (Clifton, 1975; Lefley, 1975; Aboud, 1979), but as stated earlier, the ECHO questions did not tap the traditional personal "self-esteem" areas. The age differences in the present study may be a function of the developmental trend observed in the cited ECHO appraisers - the older children tended to reject outside moral judgement and turn towards their own consciences for approval. Perhaps the advanced grades are not as conforming to moral behaviours and will tend to score lower on this type of measure.

The grade x sex interaction on the PSCI was also unexpected but may be explained by the age range of the present sample. The grade six group falls in the upper range of recommended age groups for PSCI administration and the ceiling of the test may have erased the sex differences found in the younger grades.

The "extra items" on the MSPI were inserted purely for their exploratory value and the results, although of interest, must be considered accordingly. The significant culture differences on items No. 10 and No. 15 (obeying just family and property damage vs fighting) would seem to support reported traditional values for the Indian group (Hawthorne, 1967; Spindler and Spindler, 1971). These items illustrate the importance of the extended family for Indian moral behaviour and the devaluation of material property in favour of more intangible holdings. The last

item, No. 21, which referred to the importance of "cleaning up the class" in school infers more serious implications. Although only a single item, this culture difference suggests the need for an investigation into the hierarchy of valued activities in school and their relevance for academic achievement.

Previous research with the Coopersmith has indicated that the subscales may be of questionable use. Ketchum and Morse (1965), in an extensive study of schoolchildren from grades 3, 5, 7, 9 and 11 dropped the lie subscale from their test data because of "difficulty in its use" (p. 76) and stated that it was "not proven workable as a control score" (p. 78). For the present sample this subscale produced significant sex, grade and culture differences (females, younger grades and Indians scored higher). The scale is reported to measure socially desirable and defensive responses but despite the higher "lie" score the overall Coopersmith scores of these "higher lie scale" groups were lower than the groups with lower "lie" scores. The Indians scored lower than the whites, the younger grades scored lower than the older grades (consistent with Burnapp, 1972) and the females scored lower than the males. Despite their attempts at "defensiveness" and "social desirability" these children still did not outscore the more "honest" children.

There were no hypotheses made concerning differences in the academic achievement ratings received by the children. The significant culture difference found is not unexpected, with the present sample and may have its basis in any one or a combination of separate factors - the most salient of which is the higher absenteeism of the Indian students. The procedure chosen for the present study of teacher-assigned academic achievement ratings may in itself be biased but weighed against traditional achievement tests it emerges as the more culture-fair method.

Conclusions

In summary, both the preliminary and the main investigations of this study have produced some predicted and some unexpected results. Both studies have shown that the relationship between a child's self-perception and his academic achievement is one that can be differentially affected at all levels by a range of variables.

The research conducted here has been, for the most part, of an exploratory nature. The scope of the varied results suggests many areas which will need to be further defined and elucidated before definitive conclusions concerning the correlative or causative relationships between self-concept and achievement can be drawn.

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APPENDIX A

The Coopersmith Self-Esteem Inventory

Coopersmith Self-Esteem Inventory

Form A - 58 items

		LIKE ME	UNLIKE ME
1.	I spend a lot of time daydreaming.	( )	( )
2.	I'm pretty sure of myself.	( )	( )
3.	I often wish I were someone else.	( )	( )
4.	I'm easy to like.	( )	( )
5.	My parents and I have a lot of fun together.	( )	( )
6.	I never worry about anything.	( )	( )
7.	I find it very hard to talk in front of the class.	( )	( )
8.	I wish I were younger.	( )	( )
9.	There are lots of things I'd change about myself if I could.	( )	( )
10.	I can make up my mind without too much trouble.	( )	( )
11.	I'm a lot of fun to be with.	( )	( )
12.	I get upset easily at home.	( )	( )
13.	I always do the right thing.	( )	( )
14.	I'm proud of my school work.	( )	( )
15.	Someone always has to tell me what to do.	( )	( )
16.	It takes me a long time to get used to anything new.	( )	( )
17.	I'm often sorry for the things I do.	( )	( )
18.	I'm popular with kids my own age.	( )	( )
19.	My parents usually consider my feelings.	( )	( )
20.	I'm never unhappy.	( )	( )
21.	I'm doing the best work that I can.	( )	( )
22.	I give in very easily.	( )	( )
23.	I can usually take care of myself.	( )	( )
24.	I'm pretty happy.	( )	( )
25.	I would rather play with children younger than I am.	( )	( )
26.	My parents expect too much of me.	( )	( )
27.	I like everyone I know.	( )	( )
28.	I like to be called on in class.	( )	( )
29.	I understand myself.	( )	( )

		LIKE ME	UNLIKE ME
30.	It's pretty tough to be me.	( )	( )
31.	Things are all mixed up in my life.	( )	( )
32.	Kids usually follow my ideas.	( )	( )
33.	No one pays much attention to me at home.	( )	( )
34.	I never get scolded.	( )	( )
35.	I'm not doing as well in school as I'd like to.	( )	( )
36.	I can make up my mind and stick to it.	( )	( )
37.	I really don't like being a boy - girl.	( )	( )
38.	I have a low opinion of myself.	( )	( )
39.	I don't like to be with other people.	( )	( )
40.	There are many times when I'd like to leave home.	( )	( )
41.	I'm never shy.	( )	( )
42.	I often feel upset in school.	( )	( )
43.	I often feel ashamed of myself.	( )	( )
44.	I'm not as nice looking as most people.	( )	( )
45.	If I have something to say, I usually say it.	( )	( )
46.	Kids pick on me very often.	( )	( )
47.	My parents understand me.	( )	( )
48.	I always tell the truth.	( )	( )
49.	My teacher makes me feel I'm not good enough.	( )	( )
50.	I don't care what happens to me.	( )	( )
51.	I'm a failure.	( )	( )
52.	I get upset easily when I'm scolded.	( )	( )
53.	Most people are better liked than I am.	( )	( )
54.	I usually feel as if my parents are pushing me.	( )	( )
55.	I always know what to say to people.	( )	( )
56.	I often get discouraged at school.	( )	( )
57.	Things usually don't bother me.	( )	( )
58.	I can't be depended on.	( )	( )

APPENDIX B

The Twenty ECHO Cards

Preliminary Study - The Twenty ECHO Cards

The 20 cards each child received contained five blue, five yellow, five green and five pink cards (for later ease in sorting). Printed on each card of the first set was "What would be a good thing for you to do?" On the reverse of the card was "Who would approve or be pleased?" The second set (yellow) asked "What would be a bad thing for you to do?" with "Who would disapprove or be angry?" printed on the reverse. The third set (green) asked "What would be a good thing to do at school?" followed by "Who would approve of this or be pleased?" on the back of the card. The last five cards (pink) asked "What would be a bad thing to do at school?" followed by "Who would disapprove or be angry?"

This order ensured firstly that the general, open-ended questions were presented before the more specific "school" questions and secondly that the "good" cards preceded the "bad" in each set. This prearranged order was to avoid bias in the childrens' answers. It was thought that if the "school" and "general" order were varied the general questions might have elicited too many responses with academic connotations.

APPENDIX C

Instructions for the ECHO Responses

Instructions for the ECHO Pilot Study

1. I am from the University of Victoria and doing some research on how children of your age feel about different activities. I am going to ask you to write answers to four different questions on these cards so that I can see the differences and similarities in the way you feel.
2. I would like you to put your name on the first card so that I can keep them grouped together. Your first name will do, it is not to identify you, only to help me with sorting.

   I have no interest in your personal answers and only I will be reading these cards. I promise that neither your teachers nor your parents will see these answers so I want you to think hard and write exactly what you feel.
3. Each of you will receive a stack of 20 cards. Many of these cards will be the same as each other, cards with the same questions will be the same colour. There will be four questions in all and each of these questions will be asked five times. There is also a question on the back of each card. So each time you answer the question on the front of the card, turn it over and

answer the one on the back before taking the next card from the pile.

4. Here are the cards. Please don't forget to put your name on the first one and then work at your own speed. This is not a test, only a survey of how you feel. Put your hand up when you're finished and I'll collect the cards.
5. Any questions?
6. Put your name on the first one and go ahead.

APPENDIX D

Mean Number of ECHO Responses Per Question by Culture

Pilot Study

Mean Number of Responses Per Question

	Question 1	Question 2	Question 3	Question 4
White	5	4.86	4.52	4.52
Indian	4.59	3.90	3.64	3.86
Combined	4.79	4.37	4.06	4.18

APPENDIX E

Categories of "Approvers" and "Disapprovers"

Pilot Study--
Categories of "Approvers" and "Disapprovers"

1. Family
2. Father
3. Mother
4. Parents
5. Grandparents
6. Uncles and Aunts
7. Siblings
8. Cousins
9. Friend
10. Other Students
11. Parents and Teacher
12. Principal
13. Teacher
14. Principal and Teacher
15. Schoolworker
16. Enforcing Agencies (Police, Game Warden, etc.)
17. "Everybody" (includes anonymous recipient of behaviour)
18. Religious Force
19. Animals, Fish, etc.
20. Inanimate Objects
21. "Me"
22. "Me" and someone else
23. Experimenter

APPENDIX F

The Sorting of the ECHO Responses

The Preliminary Study--
The Sorting of the ECHO Responses

Rather than attempt to construct a priori categories and fit the responses to these structures, sorting was done by compiling sets of similar answers and developing a new category when a response appeared that was inappropriate for any of the previous structures. This sorting resulted in 28 categories.

The responses were also sorted by five graduate student judges who chose a question at random and sorted freely. The categories formed by these independent judges were compared with those developed previously. The major categories formed by all sorters were in agreement but in some cases blocks of responses had been categorized differently (for example--combining specific obeying acts with chores or considering property damage as part of stealing). At this point the existing categories were shown to the sorters who, in each case, agreed that the original assignment to category was equally acceptable to them.

APPENDIX G

The Categories of ECHO Behaviours

Pilot Study

Categories of Behaviours

1.	Fight, bulley, tease	
2.	Throw objects	
3.	Spit, swear, smoke, drink	
4.	Disobey and disrespect parents	
5.	Specific disobeying acts (e.g. chew gum)	Obeying acts (e.g. be quiet, don't litter)
6.	Property damage (e.g. break windows)	Chores
7.	Be inconsiderate, bad	Be considerate, helpful
8.	Steal	
9.	Lie	
10.	Run away	
11.	Selfish recreation (recreation pleasing only self)	Unselfish recreation (recreation that would please others)
12.	Disobey, disrespect, not listen to teacher	Obey, listen and help teacher
13.	Don't do schoolwork	Do work
14.		Improve work
15.	Don't do specific subjects	Do specific subjects
16.	Play hooky	Go to school
17.	Quit school	Get an education
18.		Go to college

APPENDIX H

A Discussion of the Preliminary Study Results

The Preliminary Study--
A Discussion of the Results

The original hypothesis concerning the pilot study suggested that there would be significant culture differences in both the behaviours cited and the appraisers of these behaviours. Both these hypotheses were confirmed and some unexpected results were discovered as well.

The significant difference between the number of responses for the two cultures seems due mainly to the writing skills of the children, many more of the Indian children had difficulty putting their thoughts on paper. Further research using this technique cross-culturally should weigh the advantages and disadvantages of oral responses. The scope of the present study did not suggest indigenous testers but in future work the advantages of this method should be considered.

The significant difference between the number of responses to the first questions as compared to the number of responses to the later questions seems to be a function of subject fatigue rather than the nature of the questions. The children found the stack of 20 questions overwhelming. Fewer questions do not seem feasible so once again--further research with ECHO and this age group should weigh the advantages and disadvantages of

randomly ordering the questions. The present study chose not to do this because of possible answer bias.

The differences found in the choice of "approvers" and "disapprovers" are interesting. It appears that with maturity teachers become less important as appraisers and "me" or the child's own conscience becomes more salient. There was also a culture difference in this area, the Indian child appears to look for more external approval than the white child. Havighurst and Neugarten (1954) found conflicting data in their sample. The white children were more likely to chose the teacher as a "moral surrogate" than the Indians. There are a number of variables which may have attributed to this difference. Especially relevant may be the fact that the present sample represents a more assimilated group of Indians as well as the fact that the Havighurst and Neugarten study used "general" questions exclusively.

The Indians in this sample upheld their culture's belief in kinship ties--these children turned to their extended family for approval and disapproval while the white children looked for more general social sanctions--"everyone."

APPENDIX I

The Values Used in the Construction of the Moral Self-Perception Inventory

The Values Used in the Construction of the Moral Self-Perception Inventory

Question	*Race*	*Behaviour*
Good to Do	Indian	Go to school
	White	Do as told at home
	Both	Help with chores at home
		Help with cleaning at home
Bad to Do	Indian	Play hooky
	White	Smash windows, break something
	Both	Pick on kids
		Fight
Good to do at School	Indian	Help with chores
	White	Improve schoolwork
		Be nice to others
		Be good
	Both	Do schoolwork
Bad to do at School	Indian	Not listen to the teacher
		Not obey the teacher
	White	Be bad just to bug the teacher
	Both	Fight

APPENDIX J

The Moral Self-Perception Inventory
"Extra Items"

The Moral Self-Perception Inventory "Extra Items"

1. Helping the teacher clean up the class is one of the most important things in school.
2. I think it is more important to obey your family than anyone else.
3. I think it is worse to hit someone or fight than break something.
4. I think about school a lot when I'm at home.

The first extra item, an Indian-specific value, arose with the third ECHO question (good to do at school). The frequency of "chores and cleanup" responses suggested an item which would rank the importance of this task for the Indian students. The second extra article arose with the culture differences in choice of appraiser. The importance of kinship sanctions seemed an important Indian-specific value. The third extra item was inserted to investigate the trend in the pilot data for whites to stress property damage as bad while Indians stressed fighting. The last item is simply an attempt to shed some light on the school-home dichotomy for both groups.

APPENDIX K

The Moral Self-Perception Inventory

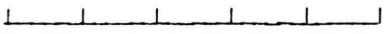
Name: _____

Grade: _____

Example:

1. I like chocolate chip cookies.  I hate chocolate chip cookies.

2. I watch T.V. a lot.  I never watch T.V.

1.	I help with classroom cleaning and tidying.		I never help with classroom cleanup.
2.	I never do any chores at home.		I help out with the chores at home.
3.	I go to school every day.		Most days I don't go to school.
4.	I just want to do my work at school.		I want to try and do better work at school.
5.	I never play hooky.		I play hooky a lot.
6.	I don't care if I am nice to the other people at school.		I try to be nice to other people at school.
7.	I never try to be bad just to bug the teacher.		I often do things at school just to be bad and bug the teacher.
8.	I pick on other kids.		Other kids pick on me.
9.	I try to be good at school.		I am bad at school.
10.	I think that I obey more people than just my family.		I think it is more important to obey your family than anyone else.
11.	I never listen to the teacher.		I always listen to the teacher.
12.	I think about school a lot when I'm at home.		I don't think about school at all when I'm at home.

13.	I do some of the cleaning at home.		I don't help with any cleaning at home.
14.	I fight a lot.		I never get into fights.
15.	I think it is worse to smash windows or break something than fight.		I think it is worse to hit someone or fight than break something.
16.	I always obey the teacher.		I never obey the teacher.
17.	I don't do as I am told at home.		I do as I am told at home.
18.	I would never fight at school.		I fight a at school a lot.
19.	I don't do my work at school.		I do my work at school.
20.	I could never smash windows or break something.		I could easily break something or smash windows.
21.	Helping the teacher clean up the class is one of the most important things in school.		Helping the teacher clean up is not an important part of school.

APPENDIX L

The Instructions for the Moral Self-Perception Inventory

Instructions for the Moral Self-Perception Inventory

1. Each of you will receive one of these forms. The first thing I want you to do is put your name on the front. Once again only your first name is fine.
2. On the front page you will see 2 examples. The first says "I hate chocolate chip cookies" on the left and "I like chocolate chip cookies" on the right. Between these two sentences are 5 spaces. I want you to put a check in one of those 5 spaces that represents yourself.

   So, if you like chocolate chip cookies you'd put a check right next to the sentence on the left, if you hate them you'd put a check next to the one on the right. If you think you are midway--you don't like them or hate them put a check in the middle. If you like them a bit put a check in the second space and if you hate them a bit put a check in the fourth space.
3. Now everyone try that example and then do No. 2 Are there any questions?
4. Now, there will be 21 more questions set up just like these 2 examples. There are no right or wrong answers. Put a check in the space that represents how *you* feel each time. Don't forget to read both sides of

each question. Only I will see your answers, not your parents or your teachers.

5. Any questions?

APPENDIX M

The Academic Achievement Rating Request

The measure of academic achievement I am looking for is an accurate estimate of the child's *actual academic performance*--an averaging of tangible assignments in class. For this rating I am not interested in attitude, motivation or attentiveness (despite the role they may play in attaining the grade assigned). I do not need an overall rating of school contribution.

I would like this assigned grade to reflect the same sort of academic expertise as a school entrance exam might--a score reflecting *the level of knowledge as measured by our school system.* In other words, a grade which is as objective as possible and not subjective.

Therefore on the basis of each child's *written performance in the academic subjects* (language arts, science, arithmetic, social studies, etc.) could you please assign each child to one of the following 4 levels--

4. Very Good
3. Good
2. Satisfactory
1. Poor

Could you also please assign each child to the appropriate racial group--C Caucasian, I Indian or O Oriental.

APPENDIX N

Pearson Correlation Coefficient Matrices Illustrating the Relationships Among the Three Test Instruments, Academic Achievement and Sex and Grade - Separately by Culture and With Cultures Combined

Pearson Correlation Coefficients - White

Variables	Sex	Grade	PSCI	MSPI	Coopersmith	Liescore	Academic Subscale	Achievement
Sex								
Grade	.38**							
PSCI	-.29*	ns						
MSPI	-.37**	-.32**	.27*					
Coopersmith	-.12/ns	-.10/ns	.40**	.33**				
Liescore	-.12/ns	-.14/ns	.38**	.49***	.40**			
Academic Subscale	-.12/ns	-.10/ns	.34**	.39**	.81***	.25*		
Achievement	-.04/ns	-.33**	ns	ns	.26*	ns	.37**	

* $p < .05$

** $p < .01$

*** $p < .001$

Pearson Correlation Coefficients - Indian

Variables	Sex	Grade	PSCI	MSPI	Coopersmith	Liescore	Academic Subscale	Achievement
Sex								
Grade	.06/ns							
PSCI	-.46***	-.10/ns						
MSPI	-.32	-.34**	.45***					
Coopersmith	-.15/ns	-.09/ns	.44**	.33***				
Liescore	-.07/ns	-.11/ns	-.10/ns	.23/ns	.29*			
Academic Subscale	-.06/ns	-.28*	.32*	.22/ns	.55***	-.001/ns		
Achievement	-.35**	-.26*	.24*	.34**	.20/ns	.06/ns	.14/ns	

* $p < .05$

** $p < .01$

*** $p < .001$

Pearson Correlation Coefficients - Cultures Combined

Variables	Sex	Grade	PSCI	MSPI	Coopersmith	Liescore	Academic Subscale	Achievement
Sex								
Grade	.22**							
PSCI	-.37***	-.07/ns						
MSPI	-.30***	-.32***	.39***					
Coopersmith	.09/ns	.06/ns	.36***	.32***				
Liescore	-.20*	-.18*	.20*	.25**	.08/ns			
Academic Subscale	-.05/ns	-.16/ns	.32**	.29***	.69***	.05/ns		
Achievement	.03/ns	-.14/ns	.12/ns	20*	.46***	-.24**	.31***	

* $p < .05$

** $p < .01$

*** $p < .001$

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George, D.M. and Hoppe, R.A. Racial identification, preference and self-concept, Canadian Indian and white schoolchildren, *Journal of Cross-Cultural Psychology*, 1979,*10* (I), 85-100.

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Title of Thesis/Dissertation

A COMPARATIVE STUDY OF THE RELATIONSHIP BETWEEN THREE MEASURES OF SELF-PERCEPTION AND ACADEMIC ACHIEVEMENT IN CANADIAN INDIAN AND WHITE SCHOOLCHILDREN

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