SELF - CONCEPT OF ABILITY AND SCHOOL ACHIEVEMENT OF SEVENTH GRADE STUDENTS IN NEWFOUNDLAND: A SYMBOLIC INTERACTIONIST APPROACH

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This is to certify that the

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ABSTRACT

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By

Amarjit Singh

Background and Purpose of the Study

In 1962, Brookover and his associates at Michigan State University began to apply a theoretical approach, symbolic interactionism, based on the social psychological theory of George Herbert Mead,to clarify variations in learning among children in schools. The present study was designed to test cross-culturally several hypotheses and explore questions developed by W. B. Brookover and his associates. An additional purpose was to compare the results of the present study with the results of similar types of studies carried out in Germany and Lebanon by J. E. Votruba and Ahmad Sidawi.

Among various factors which are believed to be affecting learning among children in schools, Brookover and his associates identified one factor (the student's self-concept of ability as a school learner) that may functionally limit learning. Student's self-concept of academic ability is symbolic behavior in as much as it involves the evaluative definitions which a student uses in comparing his own academic abilities with the academic abilities of other individuals.

A student's self-concept of academic ability results from his perception of the expectations and evaluations held by significant others as to how he will perform as a learner. The expectations and evaluations of others do not directly shape the behavior of a student in school. The crucial factor effecting a student's behavior in school is his own definition of himself as a learner which is based upon his perceptions of how significant others view him as a student. The relationship of perceived evaluation and academic achievement is conceptualized as a necessary and sufficient condition, but a positive self-concept is seen as a necessary but not a sufficient condition for academic achievement. In other words, self-concept of academic ability is an intervening variable.

The social-psychological theory of learning as developed by Brookover focuses on the interaction between an individual and others in a socio-cultural environment. Unlike the belief that variations in learning among children in schools are due to inborn differences in ability level, Brookover's interaction theory postulates that much of the variation in learning among students can be explained by studying patterns of interaction between the students and others in a particular socio-cultural environment.

A need for a social-psychological theory of learning, such as Brookover's, which provides alternatives to the theory of learning based upon the belief that human ability is inborn, limited, and differentially distributed along race and class lines, meets the need of contemporary societies for highly

trained manpower and the rising demand for social equality and social justice.

Methodology and Data Analysis Procedures

Data were collected in St. John's, Newfoundland by using instruments developed by Brookover and his associates. The population of the present study consisted of seventh grade students enrolled in sixteen different schools (five of the schools belonged to the Avalon School Board, eleven belonged to the Roman Catholic School Board) during the academic year of 1970-1971. Two sets of analyses were carried out. For one set of analyses, the relationship between self-concept of academic ability and academic achievement, data were available only for 161 students. For the second set of analyses, the relationship between perceived evaluations by others and self-concept of academic ability, and the analysis of significant others, data were available for approximately 1219 students.

Data were collected by means of questionnaires, coded and punched on IBM cards at Michigan State University Computer Laboratory; subsequent analyses were performed by the CDC 3600 at Michigan State University and by IBM 370/155 at Memorial University operated by Newfoundland and Labrador Computer Services Limited in St. John's.

Major Findings

The major results of this study may be summarized as follows:

1. Self-concept of academic ability is significantly related to school achievement of seventh grade male and female students in six schools in St. John's. The correlation between self-concept of ability and grade point average was .49 for the boys (N=69) and .51 for the girls (N=92).
2. Specific subject self-concept of ability in six subjects (Mathematics, English, History-Geography, Science, Literature and French), except in the case of French for girls, is related to seventh-grade achievement in the corresponding subjects. For boys the correlations between SSSCA and grades in each of the corresponding subjects ranged from .30 to .66 and for the girls from .20 to .61.
3. Specific subject self-concept of ability in six subjects is related to seventh grade achievement in the corresponding subjects approximately to the same degree that self-concept of ability is related to achievement in six subjects. Correlations between SSSCA and grades in corresponding subjects ranged from .30 to .66 for the boys, and for the girls from .20 to .61. Correlations between SCA and grades in corresponding subjects ranged from .23 to .55 for the boys and for the girls from .31 to .53.
4. Self-concept of ability is related to overall grade point average for seventh grade male and female students in six schools approximately to the same degree as specific subject self-concept of ability. Correlations

between SCA and GPA was .49 for the boys and .51 for the girls. Correlations between SSSCA and GPA for boys ranged from .32 to .48, and for the girls from .40 to .64.

5. Perceived evaluations by significant others: parents, friends, teachers, principals, counselors, and ministers or priests were significantly related to self-concept of academic ability of seventh grade male and female students in sixteen schools in St. John's. The correlations ranged from .22 to .46 for the combined population (N=1219).
6. Intercorrelations among perceived Parents Evaluations, Perceived Friends Evaluations, and Perceived Teachers Evaluations for the combined sample ranged from .68 to .79.
7. Associations between perceived evaluations and self-concept of ability is slightly higher than the association between SCA and overall achievement in school (GPA) for females. In the case of males the magnitude of the association between perceived evaluation of friends, parents, teachers and counselors is slightly higher than the association between SCA and GPA. The association between perceived evaluation of priest and SCA is lower in magnitude than the correlation between SCA and GPA. For the females, the correlations between the first pair of these variables ranged from .62 to .72. The correlation between the second pair of variables was .51. For males, the correlation between the first pair of variables ranged from .37 to .62. The correlation for the second

pair of variables was .49. These correlations, however, were not significantly different from each other.

8. Association between perceived evaluation by others and academic achievement (GPA) was lower in magnitude than the association between SCA and GPA, although there was no significant difference.

   The correlation between the first pair of variables ranged from .20 to .42 and between the second pair from .49 to .51.

9. For males and females the first order partial correlations between self-concept of academic ability and academic achievement was less reduced from the zero order correlation when perceived evaluations by others were controlled.

10. For males and females the first order partial correlations between perceived evaluations by others and academic achievement were greatly reduced from the zero order correlations when self-concept of ability was controlled.

11. Parents were more often named than any other persons by seventh grade students in St. John's as being concerned about how well they do in school. Mothers seemed to be significant academically for 94 per cent of the girls and 92 per cent of the boys in the Roman Catholic Schools and for 91 per cent of the girls and 89 per cent of the boys in the Avalon Schools. Fathers were named by 90 per cent of the girls and 85 per cent of the boys in the Roman Catholic Schools, and by 86 per cent of the girls

and 86 per cent of the boys in the Avalon Schools as being concerned with how well they do in school.

12. Teachers (83%), principals (61%), and friends (24%) were named more often by the girls in the Roman Catholic Schools than other students as being concerned about how well they do in school.
13. Mother (89% to 94%), father (85% to 90%), teachers (46% to 83%), and principals (18% to 61%) were more often named by most students than friends (13% to 24%) as being concerned about how well they do in school. On the average, parents were named by 85 per cent of the students as significant academically.
14. Parents were more often named than any other persons as important in their lives. Mother was named most often in this respect.
15. Mothers (95%), fathers (91%), teachers (58%), principals (32%), counselors (10%), and friends (38%) were more often named by girls in the Roman Catholic Schools than other students as important in their lives.
16. Friends were more often (22% to 38%) named than principals (5% to 32%) as being important in their lives.
17. Perceived friends' evaluations and perceived parents' evaluations (both independent variables) contribute most to the variation in self-concept of ability (dependent variable) of seventh grade students.

Conclusion

The results of this study based upon data from St. John's, Newfoundland, provided further support to the various hypothesized relationships among self-concept of academic ability, perceived evaluations by others, and academic achievement in schools. The results of this study were complementary to the results obtained by Votruba and Sidawi in their studies. The focus on the student's self-concept of academic ability as a factor that may functionally limit learning among children in school, therefore, is warranted.

The practical implications of self-concept theory lie in developing a positive self-concept among those students who have been labeled slow learners or uneducable. There is evidence that academic achievement can be enhanced by self-concept enhancement. Parents, teachers, adult relatives, and counselors as significant others may play important roles in the enhancement of students' self-concepts of ability, which in turn may effect students' educational aspirations and academic achievements. Further research is needed to determine adequate forms of connections between significant others and schools, and forms of association between students and significant others in the community, neighborhood, and at home.

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DEDICATION

To my parents, Susan, and friends
who always provided me with a touch
of love and belongingness.

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INTRODUCTION

An analysis of the educational process in schools where formal learning takes place becomes necessary if we wish to have a dialogue about knowledge and conscience in a society.[1] Such a dialogue is essentially a discourse on the nature of the relationship between man and society.

Schools are deliberately designed, formal social systems whose traditional function has been to transmit the dominant values of the older generation to the younger generation through the process of learning and teaching. Schools are also one of the important places where an individual learns to define who he himself is and how he relates to the larger society. In this process of self-other definition he learns to relate himself to others, his self-image emerges, he is in the process of becoming.

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[1]The definition of the social conscience of a society is borrowed from Abraham Edel. That is, "The social conscience of a society can be described as a pattern of assumed and felt responsibility for others, a concern for the well-being of people and for the solution of dominant social problems. Every society has some such pattern. Individuals may differ in the extent and intensity in which they exhibit responsibility. But the scope of social conscience, its mode of expression, the kinds of topics on which it is directed, are historically variable and can be seen as sociocultural formations. The only way to understand the present character of our social conscience is to set it as the outcome of a historical development of the last few centuries." See Abraham Edel, "Scientists, Partisan and Social Conscience," Transaction, IX, 3(1972)35-36.

The purpose of this study is to understand the process of learning, i.e., how children learn in a classroom situation, and to develop a theory of learning and teaching in cross-cultural contexts through systematically testing some of the hypotheses derived from the social psychological theory of learning as developed by W. B. Brookover. Brookover's theory of learning is rooted in the social psychology of George Herbert Mead; which takes into account the interaction between the individual and others in a socio-cultural environment.

The relevance, uniqueness, and need for a theory which focuses on the interaction process in order to account for variations in learning among children in schools is discussed in Chapter I. The major hypotheses drawn from the social interaction theory of Brookover and which are tested in this study are stated in the last part of the chapter.

In Chapter II the social interaction theory of Brookover, which is built around the self-concept of academic ability, is discussed.

Chapter III contains a review of literature in the areas of self-concept and how it relates to the learning process in a school situation. The review of literature is selective and directly bears upon the basic hypotheses stated in Chapter I.

In Chapter IV the methodology employed in the study is presented. Included is a discussion of the site, the population, the instruments, the operationalization of variables, and a description of how the data for this study were collected and analyzed.

Results of the analyses of data collected are presented in Chapter V. In Chapter VI the results obtained from the analyses of data are discussed and conclusions are drawn.

It should be pointed out that an understanding of the learning process in school is greatly enhanced if one focuses on the analysis of the functions of formal schools in a particular sociopolitical and economic context. The ideas presented in Chapter I will be more meaningful if one relates the specific problem of learning and teaching to the larger problems of social organization and social equality.

CHAPTER I

PROBLEM AND OBJECTIVE

Background

In 1962, a team of educators and social scientists at Michigan State University, under the leadership of Wilbur B. Brookover, began to apply a theoretical approach ("symbolic interactionism") in research design to clarify variation in learning among children in schools. Among various factors which are believed to be affecting learning among children at school, these researchers identified "one factor that may functionally limit learning of many students and thereby prevent them from working at their maximum level." This factor they called "the student's self-concept of academic ability as a school learner."[1] Theoretically, the identification of this factor, the self-concept of academic ability, was a unique contribution to the understanding of the process whereby children learn

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[1]Wilbur B. Brookover, et al., Self-Concept of Ability and School Achievement, Cooperative Research Project, Number 845 entitled "The Relationship of Self-Image to Achievement in Junior High School Subjects," (East Lansing: Michigan State University, December 1962, pp. 2-3.

in a school environment. It was unique in the sense that it recognized that the most important ideas which affect people's behavior are those ideas they have about themselves. This line of thinking is basic to the symbolic interactionist approach, which emphasizes the importance of the actor's self and his definition of the situation in explaining his behavior. The concept of self is drawn from the social psychology of George Herbert Mead, and it implies that human behavior is qualitatively different from nonhuman (infrahuman) behavior in the sense that it is always meaningful from the point of view of the behaving individual. The second concept of the definition of the situation is drawn from W. I. Thomas' theory, and it implies that the behavior of an individual is governed by the way he defines the situation around him, and not entirely by the objective condition of the situation.

The social-psychological theory of learning which W. B. Brookover and his associates developed was systematically tested by them in order to clarify the social-psychological context in which learning occurs. The results of their longitudinal studies were published in three volumes in 1962, 1965 and 1967. The theoretical objective of these studies was "to determine the antecedents and consequences of self-concept of academic ability among

adolescents, and to determine the theoretical and empirical utility of a set of basic propositions in a social psychology of learning."[2]

The self-concept of ability approach, as developed by Brookover, is based upon the following assumptions:

1. "That the social norms and expectations of others define the appropriate behavior for persons in various social situations,

2. Each person learns the definitions of appropriate behavior through interaction with others who are important or significant to him,

3. The individual learns to behave in the ways that he perceives are appropriate or proper for him,

4. The individual also acquires conceptions of his ability to learn various types of behavior through interactions with others whose evaluations are important to him."[3]

Since the publications of Brookover's studies, some of his students have extended the scope of his studies either by testing the major propositions cross-culturally

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[2]Wilbur B. Brookover, Edsel L. Erickson, and Lee M. Joiner, Self-Concept of Ability and School Achievement III, Report of Cooperative Research Project No. 2831, U.S. Office of Education, entitled "Relationship of Self-Concept to Achievement in High School" (East Lansing: Educational Publication Services, Michigan State University, 1967), p. 4.

[3]Wilbur B. Brookover, "A Social Psychological Conception of Learning," School and Society, 87:84-87, 1959; and Wilbur B. Brookover and David Gottlieb, A Sociology of Education (New York: American Book Company, 1964), Chapter I.

or by adding new variables to them.[4] Considering the difficulties involved in translating the social-psychological assumptions into testable propositions so that they can be used in educational research, testing or replication of these studies in various sociocultural contexts is a methodologically sound step toward theory building. The need for replications is even greater if social-psychological propositions are to be used to espouse a primarily social-psychological view of the phenomena called learning in cross-national and cross-cultural contexts. It is to this need and the others described earlier that the present study is addressed.

The Purpose

On the basis of the aforementioned need, the purpose of the study is to test, cross-culturally, some of the major hypotheses and to explore related questions of the basic research described in W. B. Brookover's Self-Concept of Ability and School Achievement, I and Self-Concept of

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[4]For example, see James Charles Votruba, "A Comparative Analysis of a Social-Psychological Theory of School Achievement" (unpublished Master's thesis, Michigan State University, 1970). Data for this study was collected in Germany. See also, Ahmad Sidawi, "Self-Concept of Academic Ability and School Achievement in Lebanon" (unpublished Ph.D. dissertation, Michigan State University, 1970). Also see, Howard Joseph Michael Auer, Jr., "Self-Concept of Academic Ability of West German Eighth-Grad Students" (unpublished Ph.D. dissertation, Michigan State University, 1971). German data was collected with the help of Haro Kahler.

Ability and School Achievement, III. Specifically, the purposes of this study are threefold. The first purpose is to test some of the basic hypotheses of the self-concept of ability and achievement project undertaken by Brookover and his associates in order to provide cross-cultural validity to their research by anaylzing data gathered from students in the seventh grade in sixteen schools in St. John's, Newfoundland.

In Newfoundland, the educational system at the primary (grades I to VI), junior high (grades VII to IX), and senior high levels is organized along religious denominational lines. Roman Catholics have their own schools, while the other denominations such as the Anglican, United Church, and the Salvation Army recently (1968-69) decided to consolidate schools. This structural setting provided the opportunity to explore the differences between responses of seventh grade students studying under the two school systems.

A second purpose of the study is to compare and contrast the responses of students studying under the two school systems to some questions related to the self-concept of academic ability project. Brookover's data did not include such information; therefore, this study may be regarded as an enlargement of the scope of his work.

Finally, the results of the present study (the Newfoundland Study) are compared with the Brookover, the German, and the Lebanese Studies.[5]

The theoretical and the methodological frames of reference of the present study are basically similar to the Brookover study, and are described in Chapter II and Chapter IV, respectively. The need and the theoretical significance to which this study is addressed are discussed below.

The Need

In every society, individuals must acquire the prescribed skills and knowledge which are functional both to the society and the individuals.[6] The understanding of the learning/teaching process and dissemination of knowledge are key responsibilities of the schools. Therefore, an analysis of the educational process in schools, where formal learning takes place, is an important task of educators and behavioral scientists.

One of the crucial tasks for educators and social scientists has been to explain differences in learning among children in schools. The challenge of educating a large

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[5] See James Charles Votruba for the German study, for the Lebanese study, see Ahmad Sidawi.

[6] Brookover and Gottlieb, A Sociology of . . . , p. 465.

number of individuals to meet the intellectual, scientific, and technical demands of an increasingly complex society has made it even more imperative for educators and social scientists to understand causes of variations in school learning among youngsters.

Besides the above concern for human resource development, i.e., the need for trained, skilled, educated, and imaginative individuals, most contemporary societies are experiencing rising aspirations and expectations among individuals who want to better their lives educationally, economically, and socially. Thus it is no wonder that today various racial, ethnic, religious, and socioeconomic groups and castes have become interested in the successful education of their children. Both lay and professional people are now seriously evaluating the reasons given by educators and social scientists about why some children have not achieved in learning, while other children are very successful.

Fixed Ability Model: A Traditional Explanation for Variation in School Learning Among Children

In the past, educators and social scientists have carried out various studies to explain the variations in school learning among individuals. A review of these studies indicates that educators and social scientists traditionally have focused on the individual learner and have used such concepts as intelligence, aspirational level, aptitude

tests, and sensory impairments to explain the difference in learning among children in school; some of them have also studied the stimulus properties of various teaching methods in a classroom atmosphere. But studies in the past have not focused on the interaction between social-psychological variables in a sociocultural environment; the focus in the past has been to study the mental make-up of the individual learner.[7]

The concept which has been widely used to explain variations in learning in school is the concept of ability or mental intelligence. Brookover explained it this way:

> The prevailing conceptions of intelligence in our society are (1) that ability to learn is relatively fixed or unchangeable, and (2) that it is predetermined by heredity. These beliefs assume that each individual has a limited ability to learn and that this ability is unaffected by external social forces. Another common assumption is that the fixed ability of individuals can be measured with reasonable accuracy by intelligence tests.

Based upon these beliefs, some psychologists argue "that the differences in academic achievement are best explained by differences in capacity to learn, which are relatively fixed" and this belief "is still carefully nurtured in many schools and universities."[8]

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[7]Brookover, et al., Self-Concept of Ability . . . , 1967, p. 1.

[8]Wilbur B. Brookover and Edsell L. Erickson, Society, Schools and Learning (Boston: Allyn and Bacon, Inc., 1969), p. 3.

The fixed ability model has been identified by some educators and social scientists as the "bucket" theory of intelligence.

> The metaphor makes it possible to perceive of individuals as having varying capacities, potentials, or quantities which might be measured in terms of some scale. Associated with quantity and dimension is the conception of limit: the individual who has a small quantity or small dimension for learning cannot expand the size of his bucket. In most discussion of goals of education, educational leaders tend to emphasize the importance of educating the individual to the limits of his capacity.[9]

In this sense, the fixed ability model is said to be based upon a closed-ended conception of human potentialities and seems to put unnecessary limits on the possibilities of educating those children who are labeled slow learners or uneducable.

Based upon their conception of fixed human abilities, these psychologists developed various tests to measure the ability level of children in school. A marked breakthrough in the use of tests in school was accomplished during the period between 1905 and 1908, when the French psychologists Alfred Binet and Theodore Simmons developed an intelligence scale; other types of tests were developed by psychologists as early as 1869, when Golton first published his book.[10]

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[9] Ibid., p. 8.

[10] Lawrence A. Cremin, The Transformation of the School: Progressivism in American Education 1876-1957 (New York: A Vintage Book, 1964), p. 186.

Once the tests were introduced to measure achievement of students in schools, there was a steady growth of the testing industry in the United States and the testmakers developed instruments for measuring virtually every aspect of educational activity.[11] For example, scales were developed in arithmetic (1908), spelling (1913), reading (1914), and language ability (1916). The main purpose of such tests was to sort out the stupid children from the smart ones.[12]

Based upon the results of intelligence and aptitude tests, several prominent educators in the United States, such as George B. Cutten of Colgate University (1922), Henry S. Prichett of the Carnegie Foundation, Dean Christian Gauss of Princeton, and Dean Max McConn at Lehigh University, argued that only a small proportion of the population could benefit from higher education.[13] Similar views were put forward by educators and others in England.[14] Brookover pointed

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[11]Joseph Peterson, Early Conceptions and Tests of Intelligence (Yongers: World Book Company, 1925), Chapter V-X, cited in Cremin, The Transformation of . . . , p. 186.

[12]Cremin, The Transformation of . . . , p. 187.

[13]Ibid., pp. 189-190.

[14]Brian Simon, Intelligence, Psychology and Education (London: Lawrence and Wishart, 1971), pp. 9-27.

out that "One basic assumption of the twentieth century educational practices in the United States is that only a limited proportion of American youths is capable of a high level of educational effort."[15] As late as 1959, James B. Conant assumed that only 15 to 25 per cent of high school students in the United States could be benefited by education in such subjects as mathematics, science, and foreign languages.[16] The views of Conant and several others are contrary to the views of those scholars in the United States and in other countries who assume that in a conducive learning environment most students can learn the prescribed school subjects and can be benefited by them. Carroll, Bloom, and Sanders argued that almost 95 per cent of students can master a subject if given sufficient time and help.[17] Henry Chauncey, after observing the educational process in the Soviet Union wrote that all Russian students are required to take such subjects as mathematics, physics, chemistry, biology, literature, and foreigh languages in the last three years of their high school and that Russian

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[15]Brookover, et al., Self-Concept of Ability . . . , 1962, p. 7.

[16]James B. Conant, The American High School Today (New York: McGraw-Hill Book Company, 1959), p. 20.

[17]John B. Carroll, "A Model of School Learning," Teachers College Record, 64 (May 1963),p. 729; Benjamin S. Bloom, "Learning for Mastery," Evaluation Comment, 1 (May 1968), and Donald P. Sanders, "Toward A Theory of Educational Development," Comparative Education Review, 13:3 (October 1969), p. 283.

educators and social scientists ". . . expect all their students to take it [the above curriculum], profit from it, and complete it . . . ." Chauncey estimated that "somewhere between 50 to 80 per cent of Russian students actually get through the ten year school program."[18] In a similar vein, Brookover and Erickson wrote that

> Although we recognize that there may be limits to the range of human learning that are fixed in the organism, we see no evidence that these are functional or that they have been identified except in a small number of individuals with specific organic defects. Too few people ever achieve up to their limits; they can always learn more. Functional limitations on learning, however, are imposed on each of us by our perceptions of what we are capable of and what we ought to be doing. With rare exceptions, the ability of human beings is limited only by the socio-cultural environments in which they live. They learn what ever the society defines appropriate and provides for them to learn.[19]

The belief in the concept of fixed ability or mental intelligence has a long history, which found expression in Social Darwinism.[20] As mentioned earlier, this belief is based upon two assumptions and has been used by educators, politicians, and social scientists for various purposes. The two dominant assumptions are " (1) that ability to

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[18]Henry Chauncey, "Some Observations on Soviet Education," Proceedings of the 1958 Invitational Conference of Testing Problems (Princeton, New Jersey: Educational Testing Service, 1959), pp. 71-79; cited by Brookover, et al., Self-Concept of Ability . . . , 1962, p. 2.

[19]Brookover and Erickson, Society, Schools, and . . . , p. 17.

[20]Richard Hofstadter, Social Darwinism in American Thought (Boston: Beacon Press, 1955).

learn is relatively fixed or unchangeable, and, (2) that it is predetermined by heredity."[21]

> The implication of these two assumptions spilled over in various directions. Intelligence came to be defined as inherited capacity, and it was looked upon as a basic dimension of an individual person. The hope of improving a man's lot shifted from the euthenic strategy of improving his upbringing and education to the eugenic strategy of finding some way to select only the more intelligent for the propagation of the race. Differential fertility came to be viewed with alarm. Investigative effort concerning child nature and child development was directed toward the normative mode of measuring the individual characteristics and relating the measures of age. Individual characteristics were quantified and discussed in the language of dimensions and scales without ascertaining their development and neuropsychological characteristics. Investigations of the effects of various kinds of experience at various ages on the development of intellectual capacity were discouraged. Practical educational efforts to cultivate intellectual capacity, particularly in the very young, were discouraged. With behavioral development conceived to be a process in which anatomic maturation automatically brought with it the response repertoire, experts warned parents not to overstimulate their infants but rather to leave them alone to grow. Finally the assumptions of fixed intelligence and predetermined development may well have had something to do with what has been an over-emphasis upon personal selection and an under-emphasis upon problems of both training and arranging the social climate of institutions to foster personal interest and growth.[22]

[21] Brookover and Erickson, Society Schools and Learning . . . , p. 3.

[22] See J. McVicker Hunt, Intelligence and Experience (New York: The Ronald Press Company, 1961), pp. 347-348.

Further Implications of the Fixed Ability Model

The belief in the fixed ability model has further implications for several groups of people in society. For example, in the United States and elsewhere the argument of fixed ability has been used by elitist theorists of society, who justified the status-quo in social structure.[23] In the context of colonial education, arguments used by several colonial educators and administrators centered on the fixed ability model, which justified the vocational, agricultural, or practical type of education for the masses of people in the colonies. This provided the justification for the colonial educaitonal policy for a long time. At that time it was argued that non-Europeans were racially inferior in intelligence to the Europeans, and therefore needed a different kind of education.[24]

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[23] Hofstadter, Social Darwinism in . . . , see especially chapters six and seven, pp. 135-142; also see William Chandler Bagley, Determinism in Education (Baltimore: Warwick and York, Inc., 1925); cited in Cremin, The Transformation of . . . , p. 191. This book deals with the classic argument over Social Darwinism.

[24] For example see Norman Leys, Last Chance in Kenya (London: Hogarth Press, 1931), esp., pp. 101-67; J. W. C. Dougall, "Characteristics of African Thought," Africa, (July 1932), pp. 249-65; H. L. Gordon, "Mental Capacity of the African," Journal of the African Society, XXX (July, 1934), 226-42; W. B. Mumford and C. E. Smith, "Racial Comparisons and Intelligence Tests," Journal of the Royal African Society, XXXVII (Jan., 1938), 46-57; R. A. C. Oliver, "Mental Tests for Primitive Races," The Year Book of Education (London: Evans Bros., 1935), pp. 560-70; A. G. J. Cryns, "African Intelligence: A Critical Survey of Cross-Cultural Intelligence Research in Africa South of the Sahara," Journal of Social Psychology, IVII (Aug., 1962) 283-301; L. E. Andor, Aptitudes and Abilities of the Black Man in Sub-Saharan Africa 1784-1963: An Annotated Bibliography (Johannesburg: National Institute for Personnel Research, 1966).

In the contemporary industrial and stratified societies, educational systems are generally organized around the concept of fixed ability. Thus Brookover and Erickson wrote that

> The assumption of fixed ability continues to dominate the practice and organization of American education. The emphasis on the identification of people with various learning 'abilities' or 'talents' and through this the selection of people for various types of education and training, have overshadowed any efforts in American schools to cultivate the appropriate social climates or environments which would develop the academic abilities of children in appropriate fields. The emphasis therefore, is on identifying and selecting, so that the round pegs are appropriately placed in the round holes, rather than on creating the appropriate environment and providing the experience that would produce the kind of citizens needed in a highly technical and literate society. We must investigate the reasons for this continued assumption of fixed ability in order to understand and improve our educational system.[25]

Herriott pointed out that the practice of sorting and selecting children by using tests characterizes elitist educational systems, which do not show much regard for the potentialities of the majority of learners.[26]

Several other observers of American society have commented on the remarkable continuity of the belief in fixed ability. Hunt pointed out that although there

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[25] Brookover and Erickson, Society, Schools and . . . , p. 5.

[26] R. E. Herriott, "Some Determinants of Educational Aspiration," Harvard Educational Review, XXX,2 (1963), 157.

is a serious question about the validity of the concept of fixed ability, any explanations which do not fit this model and the current testing and classifying practices are rejected.[27] Milton Schwebel notes that educators and others continue to hold the belief in fixed ability because of another belief, which dictates that success by a large proportion of youngsters in schools may not be functional for stratified societies.[28]

Observations like the above have been made about other industrialized societies. For example, Brian Simon, in his well-documented book, pointed out that psychometric tests (mental intelligence tests) which are built upon the fixed ability model provide the rationale for the grouping and streaming of students in order to channel them into various types of schools and curriculum.[29] D. F. Swift, another British sociologist expressed similar views.[30]

The common point which is being made by the scholars mentioned above is that the fixed ability model ends up

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[27]Hunt, Intelligence and Experience . . . , see Introduction.

[28]See Milton Schwebel, Who Can Be Educated? (New York: Grove Press, 1969). Schwebel reviews the comparative educability of mankind and discusses the functioning of the American educational and social system.

[29]Simon, Intelligence, Psychology and . . . , pp. 200-236.

[30]D. F. Swift, "Educational Psychology and the Environment: A Controversy at Cross-Purposes," British Journal of Sociology, XVI (1965), 334-350.

providing the rationale and ideology for stratification on race, caste, ethnic, and class lines via various testing and other selection procedures. That this is the case becomes evident when the way the concept of fixed ability has been used in the past or is being used in the present is analyzed. For example, during the Nazi period in Germany, an attempt was made to associate innate intelligence with race, and thus one controversy came to be centered on race differences.[31] The post-World War II period saw a discussion of the race-intelligence controversy in the United States at the national level, centered on the school segregation issue.[32] The debate between Lewis Terman and George Stoddard in 1939 before the National Education Association over the issue of whether I.Q. remains constant or varies with education

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[31]Arguments in favor of "racial explanation" for differences in intelligence were systematically put forward by Carl C. Brigham, A Study of American Intelligence (Princeton: Princeton University Press, 1923). This controversy is still continued--see for example Otto Klineberg, Race Differences (New York and London: Harper and Brothers, 1935), Part II; Otto Klineberg, ed., Characteristics of the American Negro (New York and London: Harper and Brothers, 1944), Part II; cited in Cremin, The Transformation of . . . , pp. 191-92.

[32]See Frank McGurk, "A Scientist's Report on Race Differences," U.S. News and World Report, (September 21, 1956), pp. 92-96; William M. McCord and Nicholas J. Demeralt III, "Negro Versus White Intelligence: A Continuing Controversy," Harvard Educational Review, XXVIII (1958), 120-135; Frank C. J. McGurk, "Negro vs. White Intelligence'--An Answer," Harvard Education Review, XXIX (1959), 54-62.

and environment, concluded without any resolution of the problem.[33]

Controversy of this nature is still with us in the 1970's, and has been revived by A. R. Jensen and others. Jensen argued that blacks in the United States are innately less intelligent than whites. His argument further implies that poor whites are also innately less intelligent than the middle-class whites. Thus, he ties the concept of race and class together in his attempt to explain variations in school learning among children of various ethnic, racial, and social class groups. Using tests which are assumed to be measuring the individual's "intelligence," he claimed that 80 per cent of "intelligence" variance is explained by genes and only 20 per cent by environment, and that school achievement is the function of intelligence. Therefore, Jensen claimed that no social or educational policy can change the status of social, economic or racial groups. Any attempt to do so would waste the scare resources of society.[34] Needless to say, the implications of such an

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[33] National Education Association. Address and Proceedings, 1939, pp. 89-90; Time (July 17, 1939), p. 65. The Twenty-Seventh and Thirty-Ninth Yearbooks of the National Society for the Study of Education, contain an extended discussion of the question; see also George D. Stoddard: The Meaning of Intelligence (New York: The Macmillan Co., 1943), cited in Cremin, The Transformation of . . . , p. 192.

[34] A. R. Jensen, "How Much Can We Boast I.Q. and Scholastic Achievement?" Harvard Educational Review, XXXIX,1 (Winter 1969), 1-123. This article was polemical in nature and the discussion it produced was published in the Spring, 1969, Harvard Educational Review.

explanation of differential learning in schools among the children of various groups in a pluralistic society are grave; such explanations are at the root of hostilities and polarizations among various groups in society.

The discussion up to this point has not been provided to undermine the efforts of various psychologists, educators, and social scientists who have been trying for years to understand the variations in learning in schools among various individuals. This feeling was perhaps best expressed by Brookover and Erickson, and therefore is quoted here: "Perhaps the polemics which characterize discussions about fixed intelligence are a reflection, for some, of an emotional attachment for a set of beliefs." The somewhat critical discussion of the concept of a fixed ability model should not be regarded as a negative criticism; rather "it should emphasize the integration of a social system which served the needs of American society extremely well for several decades." Brookover and Erickson further pointed out that

> probably no other society has developed a more efficient system of education than has America during the past quarter century. Considering the circumstances of the times, the effectiveness of the past educational practices in our society was not reduced by the fact that the belief in fixed intelligence could not be verified by careful research. As long as it was believed that intelligence was of this sort and individuals acted on this belief, it made no difference whether it was verifiable or not.

Brookover and Erickson further wrote that

> The needs of our society have changed considerably, however, and society and science have brought us to the stage where the concept of fixed intelligence is no longer functional. In fact, it may be harmful.[35]

The Need for a Different Explanation For the Variation in School Learning

The need to explore other factors which influence the learning-teaching process, factors other than intelligence, aspirational levels, aptitude tests, and sensory impairments, has also been felt by other societies, especially after World War II, when many nations freed themselves from colonial rule and decided to enter the world stage economically, politically, and socially. Political leaders, educators, and social scientists all over the world, especially in the newly independent nations, came to regard formal education as "the master determinant of all aspects of change."[36] Technological changes were needed to mobilize the resources of societies which, in turn, demanded a supply of highly educated and skilled laborers. In this situation, governments of modernizing nations put great responsibilities on the shoulders of educators and social scientists to come up with concepts of learning and teaching

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[35]Brookover and Erickson, Society, Schools and . . . , p. 13.

[36]James S. Coleman, ed., Education and Political Development (New Jersey: Princeton University Press, 1965), p. 3; also see, John W. Hanson and Cole S. Brembeck, Education and the Development of Nations (New York: Holt, Rinehart and Winston, 1966).

which would meet the demand of society for a large number of skilled people.

If it was to be assumed that the learning ability or mental intelligence of individuals is fixed, the task of educating a large number of individuals to meet the need of these societies could not have been imagined. The problem which is addressed in the present study is not how to develop the learning capacity of 15 to 25 per cent of the talented students, as has been suggested by Conant and others, but the more pressing need of raising the ability level of 75 to 85 per cent of the individuals who have been identified as less talented.

Until 1950, only a few sociologists and social psychologists were interested in studying the educational process. Before that period, studies in education had mostly been carried out by psychologists who focused on psychological and physiological variables and their effects on learning behavior in a nonschool context.[37] During the second half of the twentieth century educators and social scientists have come not only to focus their attention on sociological variables and their influence on the learning-teaching process, but also have become aware of the interaction between these variables.[1] Many educators

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[37]Brookover and Erickson, Society, Schools and . . . , pp. 13-14.

now argue that the source of low academic achievement among various disadvantaged groups may be better explained on the basis of "cultural differences" than on the basis of difference in intelligence or teaching methods. The appropriateness of those psychological theories which concentrate on the individual's mental make-up in analyzing the learning-teaching process in schools has also been questioned by prominent psychologists.[38] On the other hand, those psychological theories which put emphasis on the interaction between the individual and his social environment, such as the development theories of Jean Piaget and the social reinforcement theories developed by Albert Bandura and Richard Walters, have been given more attention.[39]

Consequently, under the above circumstances, there has been a significant growth in cross-cultural research in

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[38]Ernest R. Hilgard, "A Perspective on the Relationship Between Learning Theory and Educational Practices," in Theories of Learning and Instruction, ed. by Ernest R. Hilgard (Chicago: The National Society for the Study of Education, 1964).

[39]For a bibliography of Piaget's work, see Hunt, Intelligence and Experience; see also Albert Bandura and Richard Walter, Social Learning and Personality Development (New York: Holt, Rinehart and Winston, 1967).

the area of the learning-teaching process.[40] C. A. Anderson pointed out some reasons for this trend:

> . . . Education has become an active area of investigation for all the social sciences. An integration between education and the social sciences is emerging as systematic comparison makes use of today's more mature social science methods to add greater rigor to these inquiries. On the level of policy, the end of colonialism and a worldwide passion for economic development are stimulating a fresh appraisal of what education does or might do towards enhancing the contribution of the human factor.[41]

This interest in cross-cultural education created the need to develop research designs and theoretical frames of reference which would focus on the process of learning in cross-cultural settings and be able to account for differences in learning due to cultural and subcultural variations, not due to some innate or fixed ability.[42]

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[40]See for example: W. Wiersima, "A Cross-National Comparison of the Academic Achievement of Prospective Secondary School Teachers," Comparative Education Review, XIII,2 (June, 1969) 209-212; W. I. Grams, Jr., "A Multivariate Analysis of the Correlates of Educational Efforts by Nations," Comparative Education Review, XIII,3 (1968) 281-99; N. Trowbridge, "Cross-Cultural Study of Creative Ideas in Children," Comparative Education Review, XII,1 (February, 1968) 80-83; and T. Husen, ed., International Study of Achievement in Mathematics--A Comparison of Two Countries (New York: John Wiley and Sons, 1967) 2 Vols.; Roger Homes, "The Transient and the Subsumed: Some Epistemological Implications of Cross-Cultural Research," Comparative Education Review, XIV (February, 1970) 60.

[41]C. A. Anderson, "Methodology of Comparative Education," in Education in Comparative and International Perspective, ed. by Kalil I. Gezi (New York: Holt, Rinehart and Winston, Inc., 1971), p. 35.

[42]Swift, "Educational Psychology, Sociology . . ., pp. 334-350.

The experiences of those educators and social scientists who have had the opportunity to pursue research in the area of comparative education have made them realize the effect of different subcultural and cultural environments, such as social class, a village, or small town atmosphere vs. a city atmosphere on the learning behavior of individuals in various societies. These researchers now increasingly recognize that children in different countries learn different social behavior because they grow up in different sociocultural environments. This type of research approach has focused on identifying and describing the differences among the children of various social, ethnic, or national groups; for example, the behavior of lower class children has been frequently described as different than that of middle-class children. Similarly, differences have been found in the behavior of individuals growing up in a joint family in a small village and the behavior of children growing up in a nuclear family located in the city. Although the differences between children of various social classes and ethnic, racial and religious groups in different societies are well-documented, it has also been demonstrated that many children from the lower strata and various ethnic groups achieve as well in school as the children from the higher and dominant social strata.

It is apparent that the process whereby the children growing up in different sociocultural environments come to learn similar types of behavior has not been extensively studied by researchers interested in understanding the learning process in subcultural and cross-cultural contexts.[43]

It was pointed out earlier that research on the learning process using psychological variables is overwhelming, but these studies do not throw much light on the process of learning in a real sociocultural milieu. Most of the studies are narrowly defined, are conducted under laboratory conditions, and are based upon assumptions most appropriate for animals or nonhumans. The methods and theoretical assumptions of these studies are inadequate to explain variations in human learning in a sociocultural environment.[44] Unfortunately, these studies pay little attention to studying the interaction process between the individual and his sociocultural environment, through which the individual learns to behave in the socially expected ways. Moreover, the trend in research literature to designate various behavioral phenomena as psychosocial or sociopsychological and the evidence supported by research

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[43] Brookover, et al., Self-Concept of Ability . . . , 1967, p. 2.

[44] Brookover and Erickson, Society, Schools and . . . , see Chapter I.

that even the measured intelligence scores vary with social and other environmental factors cast doubt on the use of the psychological approach to explain variations in learning among children in school.[45]

At a time when governments and various ethnic, racial, caste, and social groups are demanding better treatment for their members, the questions which educators and social scientists must come to grips with are: Is it true that only a few people can be benefited by higher education? Can an educational system designed to stratify people meet the needs of contemporary societies? Are there any alternatives to psychometry which would make 99 per cent of the secondary school students successful in higher education?[46] How long will the social consciousness and knowledge of contemporary societies allow a self-justificatory educational system, based upon an alleged limitation of human potential, to perpetuate itself?[47] Is there any

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[45]Gale E. Jensen, Educational Sociology: An Approach to its Development as a Practical Field of Study (New York: The Center for Applied Research in Education, 1965), pp. 27-41; Also see Brookover and Erickson, Society, Schools and . . . , p. 12.

[46]The Russian psychologists suggest that theoretically it is possible that 99 per cent of the secondary school children can do well in higher education. See, H. Chauncey, "Some Observations on . . . ," p. 71-79. See also, Brookover, et al., Self-Concept of Ability . . . , 1962, p. 2.

[47]Some critics already have suggested that society should be de-schooled. See, Bruce Rusk, Alternatives in Education (Toronto: General Publishing Company Limited, 1971), especially see article by Ivan Illich, pp. 103-126.

hope of overcoming this self-fulfilling prophecy in education?[48]

A Social-Psychological Approach as an Alternative to a Fixed Ability Model

In the above context, if we want to provide true equality of opportunity to learn, there is a need for a new concept of learning. Such a new concept needs to take into consideration differences in learning among children in schools due to various sociological and psychological variables and interaction between them in a sociocultural environment. A sociopsychological approach which attempts to explain the variations in learning would be more useful than the research using psychological variables only.

A socio-psychological approach developed by W. B. Brookover and his associates at Michigan State University is such an approach. Their "research postulates that much of the variation in learning among students results from differences in the interaction with others in the

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[48] Robert Rosenthal and Lenore Jacobson, Pygmalion in the Classroom, Teacher Expectation and Pupil's Intellectual Development (New York: Holt, Rinehart and Winston, Inc., 1968). Their study indicates that it is the expectation of teachers which facilitates the intellectual growth of children. For a critical review of their book, see Peter Gumpert and Carol Gumpert, "On the Psychology of Expectation in the Classroom," The Urban Review, XXX (September, 1968), 21-26; Robert L. Thorndike, "Pygmalion in the Classroom," The Record, LXX,8 (May, 1969), 805-807.

socio-cultural environment." However, they point out that

> This model for learning should not be interpreted to mean that organic differences, be they the result of genetic, or physical impairment, play no role in academic performance. A basic thesis . . . is that within the limits set by the physiological and neurological structures of the organism, variations in behavior are influenced by variations in socialization. To the extent that we develop principles of socialization, we may better understand individual learning.[49]

Such an approach enhances the theoretical knowledge about the learning process and complements other approaches to the learning process which assume

> . . . great plasticity within the organism. The characteristics of this plasticity are illustrated clearly in experimental programs designed to contrast behavioral, neurochemical, and neuroanatomical characteristics of subjects exposed to enriched and impoverished environments (e.g., Bennett, Diamond, Krech, and Rosenzweig and Leiman, 1968). The major thrust of all these data is that environmental conditions can be manipulated to alter significantly those characteristics of behavior that are essential in an organism's adjustment to change in its environment.[50]

In a recent review of literature, Mitchel noted that educational research is increasingly focusing on the environmental factors as a determinant of behavior. He states that:

> . . . contemporary events seem to suggest most forcefully . . . that the determinants of behavior need to be sought more often in the characteristics of the environment context and the interaction of these characteristics with individual traits and

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[49] Brookover, et al., Self-Concept of Ability . . . , 1967, p. 3.

[50] Roger W. Russell, "Psychology: Noun or Adjective," The American Psychologist, XXV,3 (March, 1970), 215.

> abilities, and that a search for individual characteristics *in vacuo* can lead only to partial understanding or no understanding at all. The process used by the individual to come to terms which the environment, as Goldstein (1939) wrote, are processes that have much to say about that individual's values, traits, and characteristic modes of functioning. Faced with the almost cataclysmic impact of contemporary social and political events, it should not be difficult to accept the importance of this interaction for an understanding of human behavior. At least part of the lesson to be learned from these events, it would seem, is that social forces and environmental contexts may in certain instances be prepotent over individual traits or may in any event have such immense implications and impact that they cannot be ignored without penalty in any analysis of individual behavior.
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> We are not without warning in this respect. Sullivan (1953, 1956), Lewin (1935, 1936), Fromm (1941, 1955), Murray and Kluckholm (1953), and Getzels and Thelen (1960) have all presented theoretical points of view that emphasized the importance of environmental and social determinants and their interactions with individual needs and characteristics.[51]

Major Hypotheses

The objective of this study, as it has been pointed out earlier, is to test some of the specific hypotheses drawn from Brookover's interaction theory in a cross-cultural setting. These hypotheses are stated as follows:

Relationship of Self-Concept of Academic Ability to Academic Achievement

Hypothesis 1: Self-concept of academic ability is positively associated with academic achievement.

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[51] James V. Mitchell, Jr., "Education's Challenge to Psychology: The Prediction of Behavior from Person-Environment Interactions," Review of Educational Research, XXXIX,5 (1969), 696.

Specific Subject Self-Concept of Ability (SSSCA) and its Relationship to Grades in Six Subjects (Mathematics, English, Science, Literature, History-Geography and French) and overall achievement (Grade point Average)

Theoretically it is possible that a student may have a self-concept of ability for each subject he studies in school which is functionally different from his self-concept of academic ability. In order to test this theoretical proposition the following hypotheses were stated:

Hypothesis 2: The student's specific subject self-concept of ability (SSSCA) is associated with his achievement in the corresponding subjects in school.

Hypothesis 3: Associations between student's specific subject self-concept of ability and achievement in each of the corresponding subjects is greater than the associations between student's self-concept of academic ability and achievement in each of the subjects.

Hypothesis 4: Association between student's self-concept of ability and overall achievement (GPA) is greater than the association between student's specific subject self-concept of ability and overall achievement.

Self-Concept of Academic Ability as an Intervening Variable

Within the theoretical frame of reference of Brookover's interaction theory self-concept of ability intervenes between the perceived evaluation of others and its relationship to academic achievement. In order to test this theoretical proposition the following hypotheses were formulated:

Hypothesis 5: The magnitude of the association between the perceived evaluations of academic ability by others and self-concept of academic ability is greater than the associations between self-concept of ability and academic achievement.

Hypothesis 6: The magnitude of the correlation between self-concept of academic ability and academic achievement is greater than the correlation between perceived evaluations of academic ability and academic achievement.

Relationship of Perceived Evaluations by others to Self-Concept of Academic Ability

Basic to the interaction theory of Brookover is the proposition that student's self-concept of ability is formed in the interaction with "significant others" who evaluate him as a learner in school. Evaluations of significant others, however, do not directly effect the student's self-concept of ability. It is the student's perception of the evaluations of others about him which actually influences his self-concept of ability or behavior in school. In order to test this theoretical proposition the following hypothesis was formulated:

Hypothesis 7: Student's perception of evaluations of their academic ability by others (parents, friends, teachers, principals, counselors, ministers or priests) are associated with self-concept of academic ability.

A related question to Hypothesis 7 and, thus, related to the self-concept of ability and academic achievement is: Who are the "significant others" of the seventh grade students in St. John's. Therefore, besides testing the seventh hypothesis stated above an attempt is made in this study to identify the "significant others" of seventh grade students.

In the next chapter, a brief description of the symbolic interactionist viewpoint is given, and Brookover's self-concept theory of learning is differentiated from other symbolic interactionist theories.

CHAPTER II

THEORETICAL FRAME OF REFERENCE

Background (Symbolic Interactionism)

This study is conceived within the frame of reference of the symbolic interactionist approach as developed by Brookover and his associates.[1] Within the general perspective of this frame of reference, Brookover and his associates drew heavily upon the work of C. H. Cooley,[2] John Dewey,[3] G. H. Mead[4] and

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[1]For a detailed statement on a behavioral symbolic interactionist approach as developed by them see, Brookover, et al., Self-Concept of Ability . . . , 1967, pp. 1-17, Brookover, "A Social Psychological. . . ."

[2]Charles H. Cooley, Social Organization (New York: Charles Scribners Sons, 1909).

[3]From the social psychological viewpoint, John Dewey's philosophy, at least in the view of C. W. Mills, is best represented in his educational writings--see, C. W. Mills, "Social Psychology: Model for Liberals," in Sociology and Pragmation, ed. by Irving Louis Horowitz (New York: Oxford University Press, 1966), pp. 447-463. According to Manford H. Kuhn, "while Dewey published voluminously, his chief formulation of symbolic interaction theory is, in my view, his Experience and Nature . . ."; see Manford H. Kuhn, "Major Trends in Symbolic Interaction Theory in the Past Twenty-Five Years," Sociological Quarterly, V (Winter, 1964), 61-84; reprinted in Gregory P. Stone and Harvey A. Farbernaw, Social Psychology Through Symbolic Interaction (Waltham: Ginn-Blaisdell and Co., 1970), pp. 70-87; also see, John Dewey, Democracy and Education (New York: The Free Press, 1916) and John Dewey, Experience and Education (New York: Collier Books, 1938).

[4]George H. Mead, Mind, Self, and Society (Chicago: The University of Chicago Press, 1934).

W. I. Thomas,[5] who wrote in the general tradition of symbolic interactionism. Brookover and his associates have also incorporated into their theoretical frame of reference other complementary theoretical perspectives such as role analysis,[6] reference group theory,[7] the perceptual theory of Combs and Snygg,[8] a formalized theory of the self-concept as developed by Knich,[9] and the symbolic

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[5]Thomas' concept of the definition of the situation is most relevant to the theoretical frame of reference being discussed here. "Preliminary to any self-determined act of behavior there is always a stage of examination and deliberation which we may call the definition of the situation. And actually not only concrete acts are dependent on the definition of the situation, but gradually a whole life-policy and the personality of the individual himself follow from a series of such definitions," see W. I. Thomas, The Unadjusted Girl (Boston: Brown and Company, 1931). Quotation cited in J. G. Mani's and B. N. Meltzer, Symbolic Interaction: A Reader in Social Psychology (6th ed.; Boston: Allyn and Bacon, 1970), p. 315.

[6]R. K. Merton, Social Theory and Social Structure (Glencoe, Illinois: The Free Press, 1957); Mason W. Gross and A. W. McEachern, Exploration in Role Analysis: Studies in the School Superintendency Role (New York: John Wiley and Sons, Inc., 1958).

[7]Herbert Hyman, "The Psychology of Status," Archives of Psychology, No. 269 (1942).

[8]A. W. Combs and D. Syngg, Individual Behavior: A Perceptual Approach to Behavior (New York: Harper and Row, Publishers, 1959).

[9]J. W. Kinch, "A formalized Theory of the Self-Concept," The American Journal of Sociology, LXVIII (1963), 481-486.

interactionist theory as refined by Rose.[10] Others, including Linton[11] and Piaget,[12] have also contributed insights.

Symbolic interactionism is a particular viewpoint within social psychology and is formulated around Mead's key concepts: society, self, and mind. These concepts are interwoven and interlocked; one concept, logically, implies another. Because Brookover's symbolic interactionist theory is basically based upon the social psychology of G. H. Mead, a brief and selective description of Mead's three concepts is provided below.[13]

Society

Owing to the importance of symbols in human interaction, society is seen as symbolic interaction. And because symbols stand for common and shared meanings for the actors in the interaction process, symbolic interactionists focus their attention on the following: (1) the meaning of personal

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[10] A. M. Rose, "A Systematic Summary of Symbolic Interaction Theory," in A. M. Rose, ed., Human Behavior and Social Process (Boston: Houghton-Mifflin, 1962), pp. 3-19.

[11] Ralph Linton, The Study of Man (New York: Appleton-Century-Crofts, Inc., 1936).

[12] J. Piaget, "The Development of Time Concepts in the Child, in Psychopathology of Childhood, ed. by P. H. Hoek and J. Zubin (New York: Grune and Stratton, 1955).

[13] For a concise and informative discussion of Mead's concepts see B. N. Meltzer, "Mead's Social Psychology," in Symbolic Interaction: A Reader in Social Psychology, J. G. Manis and B. N. Meltzer, pp. 5-24. The discussion of Mead's concepts presented here is mostly drawn from Meltzer's article.

life, (2) the observation of reflective behavior, as opposed to reflex behavior, (3) interpretative behavior as opposed to conditioned behavior, and (4) on persons, not on animals. In short, symbolic interaction adheres to the minded human being, the human being with a mind of self.[14]

The symbolic interactionists hold that symbols are the key to human interaction. They argue that symbols are of crucial significance in distinguishing human and infrahuman interaction. Symbols, it is argued, distinguish man from other animals not only in degree but in kind. Thus it is emphasized that human behavior must be explained at its own level of complexity. This implies that in an on-going society man is consistently involved in interpreting and reconstructing his environment, and in this process new and complex elements emerge. Any explanation of human behavior must take into consideration this process.

The symbolic interactionists see society as emerging out of an historical process and suggest a developmental viewpoint of the study of human behavior. Society is seen in terms of what is, what was, what might be, and what ought to be. Society is thus seen existing in a dynamic process; it is constantly changing.

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[14]It has been suggested that the symbolic interactionist approach is best understood when contrasted with radical behaviorism. For a concise discussion of this sort see Peter A. Remender, "Symbolic Interaction and Education: Some Marginal Notes" (unpublished Ph.D. dissertation, Michigan State University, 1971).

Moreover, it is contended, society exists in and through communication. This conception of society is very close to Dewey's observation that "Society not only continues to exist by transmission, by communication, but it may fairly be said to exist in transmission, in communication."[15] This implies that society does not exist without actors who are sharing a universe of discourse.

Human beings, as actors, are seen as living in association with others in a community. Society is seen as a community in which actors have formed differential associations. Through this process, it is believed, a human being, as an actor, comes to have a shared definition or identification of the situation. Definition or identification of the situation is learned in association with others. There are various patterns of human association; therefore, society is understood in terms of these associations. Human behavior must be understood in terms of these differential associations. Human beings learn to define the situation in the process of interaction with those with whom they associate and identify.

Finally, the symbolic interactionist sees society as composed of selves. This implies that society does not directly shape human behavior; rather, behavior is mitigated or intervened by the actors' interpretation of social forces.

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[15] Dewey, Democracy and Education, p. 4.

Mind

Another important concept in Meadian social psychology is that of mind. The basic notions about mind are: (1) that it emerges in a social process in association with others; (2) that this social process is essentially a process of communication; (3) that the process of communication is possible only when the individual, in association with others, learns to use significant symbols, i.e., language, (4) that linguistic behavior or symbolic behavior aids the individual in internalizing the definition of others; (5) that by taking into account the definition of others the individual comes to take the perspectives of others and direct his own behavior from this perspective; and (6) that the process of social interaction enables him to learn to think; i.e., he develops the ability for reflective thinking or the ability to act intelligently. "Intelligence" emerges out of the social process. Once the mind has emerged it continuously helps the individual in maintaining and adjusting himself in his society. The continued existence of the society depends upon the minded behavior of individuals, based upon consensus.

Mental activity, or reflective thinking, is seen as a process by which a person comes to attach meaning to his own self and to others. To the extent that the

individual uses symbols in the process of indicating meaning to himself, his behavior is symbolic behavior; and minded behavior is symbolic behavior. Thus "Mind is the presence in behavior of significant symbols. It is the internalization within the individual of the social processes of communication in which meaning emerges."[16]

Minded behavior is fundamently different from nonsymbolic or nonlinguistic behavior. The latter is simply a consequence of stimulus--response mechanics, typically found at the infrahuman level, but also occasionally found at the human level. Minded behavior, being reflective behavior, is never immediate and direct; there is always an interruption and delaying of the act.

In Mead's viewpoint, mind abides in the experience of the person. Mental activity is a typical activity in which a person is continuously involved in indicating objects to himself and responding to himself as he goes on experiencing his environment by acting on it. The individual's activities determine his experienced environment; the objects occur when the activities of the individual change toward them, when the individual's activities change his environment.

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[16]George Herbert Mead, Mind Self and Society: From the Standpoint of a Social Behaviorist, ed. by Charles W. Morris (Chicago and London: The University of Chicago Press, seventh impression, 1970), p. xxii.

The objects which the individual experiences through his activities in the environment are mostly shared objects; they render order and pattern to his activities. The sharing of objects by the individual is possible only when he takes into account the definition of others; these definitions, in Mead's view, involve language or significant symbols. Needless to say, the individual learns common significant symbols in interaction with others which stand for certain meanings in reference to the objects around him. These meanings give the individual a perspective through which he looks at the world as others do.

In brief, Mead, in conceptualizing mind, rejects an interpretation of mind based upon the individual's psychology which sees mind as a box-type container or as an entity with fixed measurable dimensions in the head of the individual. To Mead, mind is not a thing which exists in the individual's brain, independent of self and society. On the contrary, he takes the processual approach, i.e. the developmental approach, to the emergence of mind as he does to the development of self.[17] For him mind presupposes the existence of society and social interaction. Mind and self develop side by side in the social process. Mind develops out of the language behavior of the human organism.

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[17]Mead's notions about the self are discussed elsewhere in this chapter.

In Meadian social psychology the relationship of the organism to the environment is central to the discussion of mind. Basically, the organism is seen as continuously trying to adapt or adjust to his environment. The environment is not seen as consisting of fixed stimuli which infringe on the biological mental apparatus of all organisms in some prefixed pattern. Among all the stimuli present in the environment, only those stimuli which are given selective attention and are consciously perceived by the organism affect the behavior of an organism. Selective attention and perception on the part of the organism intervene between the stimuli present in the environment and the organism's behavior. Perception is an activity which is involved in selecting certain aspects of the situation and is not seen as affecting the nervous system of an organism like a rubber stamp.

The organism involves itself in the process of selecting activities in the context of problem-solving situations. This is to say, the selection of stimuli by the organism corresponds to its needs, or is relevant to the act in which it is engaged. The organism's behavior, in Mead's view, is not directly determined by the stimuli. Instead, the organism has a hand in determining its behavior by selecting the stimuli through its activities. These activities are not simply initiated by stimuli, but are seen as elements selected by the individual for the

purpose of aiding on-going activities in which he is already involved.

In Mead's view, human behavior is reflective behavior. It is conscious and meaningful to the actor. It involves the evaluation of various alternatives before the individual takes final action. It does not lack the ability of abstract analysis of the situation, which is necessary in considering the possibilities of the reconstruction of the environment through future actions. And the mind is seen as social, both in origin and function. It is social in origin in the sense that it arises out of the process of symbolic communication. And it is social in function in the sense that the individual consciously controls his activities by taking the roles of others and by looking at the world through the perspectives of other people's definitions.

Self

The third key concept in Meadian psychology is the concept of self.

In the Meadian view, self is a social process. This leads to Mead's concept of "I" and "Me." These are two analytically distinguishable phases of the social self.

The "I" is something personal and peculiar to each individual. It is something which only he feels, understands, and experiences. It has not incorporated the

definitions and expectations of others. It is so to speak, an indeterminate aspect of the self. The "I" is devoid of group meaning. It is that part of human experience which is initial, undirected, spontaneous, and unorganized.

The "Me" represents different tendencies than the "I." It has incorporated the norms, expectations, definitions, understanding, and common group meaning of significant others. In other words, it is the socialized self. The "Me" is constituted of organized sets of attitudes and generalized habits.

The "I" and "Me" are two aspects of an act. Because "I" is prior to the expectations and control of others, it is the initiator of an act. All acts usually culminate in the form of "Me." Meltzer pointed out that "The 'I' thus gives propulsion while the 'Me' gives a series of initiations of acts by the 'I' and of acting-back-upon the act (that is, guidance of the act) by the 'Me.' The act is a resultant of this interplay."[18]

The "I" and "Me" are not mutually exclusive; they are integral parts of the same self. A person with self is engaged with the creative as well as conforming activities in the society. This means that self is engaged in internalized social communication. The self reorganizes

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[18]Meltzer, "The Social Psychology . . . , in Manis and Meltzer, Symbolic Interaction: A . . . , pp. 11-12.

or reconstructs the experiences continuously through internalized social communication. The self is not simply determined by social structure. This statement about the self emphasizes the fact that the self is continuously involved in the process of definition and redefinition. This is so because the "I" and "Me" are continuously interacting with each other in a dialectic process. In Mead's words:

> The self is essentially a social process going on with these two distinguishable phases. If it did not have these two phases there could not be conscious responsibility, and there would be nothing novel in experience.[19]

The symbolic interactionist emphasizes the importance of self in the analysis of individual behavior in society. Thus Blumer stated that "The key feature in Mead's analysis is that the human being has a self."[20] Manis and Meltzer spoke of "the individual with a self . . ."[21] And Mead spoke of "the human individual who possesses a self."[22]

The symbolic interactionist maintains that the individual with self is a thinking and imaginative man.

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[19]Mead, Mind, Self, and . . . , p. 178.

[20]Herbert Blumer, Symbolic Interactionism: Perspectives and Method (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1969), p. 79.

[21]Manis and Meltzer, Symbolic Interaction: A . . . , p. 495.

[22]Mead, Mind, Self and . . . , p. 272.

He is conscious of his own behavior. He may engage in self-conversation in the same way as he engages himself in conversation with others. There is no self without others. The self is seen as a fluid and active object. It is not passive and inert. Self behavior is not explained in terms of predisposed attitudes. Rather, it is emergent in nature. It is the process by which the individual comes to attach meaning to the objects around him. Self behavior is meaningful and evaluative behavior with intent.

The symbolic interactionist emphasizes the role of others in the interaction process and in the emergence of self. Different patterns of associations with others are seen as crucial in the patterning of the self. A variety of different others and heterogeneous social situations are seen as most conducive to the internalization of social norms. It is in the association of heterogeneous others that self becomes involved in seeking the possibility of alternative behavior.

Thus, the self-other relation is seen as crucial in the definition of the self--that is, of self-concept. The self-concept refers to what the individual <u>thinks</u> others think about him as an object. Thus, the crucial factor is not simply what others think about the individual, but what the individual <u>thinks</u> others think about him. It is the definition of the individual's own self by himself in relation to the definition which others

have of him that is the crucial factor in the formation of his self-concept. Others do not directly affect the self-concept of the individual; there is interaction between the others and the individual. The individual's self intervenes between the expectations, the definition of others about him, and his behavior.

The implications of selfhood in human behavior were put together by Meltzer. They are:

1. The possession of a self makes of the individual a society in miniature, that is, he may engage in interaction with himself just as two or more different individuals might. In the course of this interaction, he can come to view himself in a new way, thereby bringing about changes in himself.

2. The ability to act towards oneself makes possible an inner experience which need not reach overt expression. That is, the individual, by virtue of having a self, is thereby endowed with the possibility of having a mental life: he can make indications to himself--which constitutes mind.

3. The individual with a self is thereby enabled to direct and control his behavior. Instead of being subject to all impulses and stimuli directly playing upon him, the individual can check, guide, and organize his behavior. He is, then, not a mere passive agent.[23]

The idea of self-concept and its relevance to understanding the behavior of the individual grounded in the self-other relation was further developed by Brookover

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[23]Manis and Meltzer, Symbolic Interaction: A . . ., p. 12.

and his associates. Their theory of self-concept was particularly formulated to explain one kind of behavior, the learning behavior of children in the classroom situation. It incorporates Mead's notion about the "Me" instead of the "I".[24] This is in line with the tradition in symbolic interactionism, which seeks to "operationalize" the self by reconceptualizing it in structural terms and making it an empirical concept. In this tradition the attempt is made to tap the "Me" aspect of the self by developing paper-and-pencil measures.[25] Emphasis on the notion of "Me" by no means ignores or undermines the importance of the "I" in the understanding of human behavior.

The viewpoint of symbolic interactionists has been succinctly stated by various scholars. Blumer and Meltzer prepared an excellent summary of this position. Their

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[24]Brookover, et al., Self-Concept of Ability . . . , 1967, pp. 7-8.

[25]This tradition is generally associated with "The Iowa School" as represented by Manford H. Kuhn in his "self theory". For a brief discussion of the school, see Kuhn, "Major Trends in . . . ," in Manis and Meltzer, Symbolic Interaction: A . . . , pp. 55-57. Herbert G. Blumer represents the other school in symbolic interactionism. It is known as "The Chicago School." This school stresses the processual character of human behavior and calls for "sympathetic introspection" in the study of human behavior. This school focuses on the acting unit rather than on the structural categories. See Manis and Meltzer, Ibid., vi. Also see Blumer, Symbolic Interactionism: Perspectives . . . , for the major statement of this viewpoint. See also, B. Metzer and J. Petras, "The Chicago and Iowa School of Symbolic Interactionism," in Tamotsu Shibutani, ed., Human Nature and Collective Behavior (Englewood Cliffs, N.J.: Prentice-Hall, 1970).

statements are presented below. According to Blumer, symbolic interactionism rests on three basic premises:

> The first premise is that human beings act towards things on the basis of the meaning that the things have for them. Such things include everything that the human being may note in his world--physical objects, such as trees or chairs; other human beings, such as mother or a store clerk; categories of human beings, such as friends or enemies; institutions, such as a school or a government; guiding ideals, such as individual independence or honesty; activities of others, such as their commands or requests; and such situations as an individual encounters in his daily life. The second premise is that the meaning of such things is derived from, or arises out of, the social interaction that one has with one's fellows. The third premise is that these meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he encounters . . . .[26]

Symbolic interactionism is grounded in a number of basic ideas or, in the words of Blumer, "root images." "These root images refer to and depict the nature of the following matters: human groups or societies, social interaction, objects, the human being as an actor, human action, and the interconnection of the lines of action."[27] These root images constitute the frame of reference. Blumer explained them as follows:

> Human groups are seen as consisting of human beings who are engaging in action . . .[28]

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[26] Blumer, Symbolic Interactionism: Perspectives . . . , p. 2.

[27] Blumer, Ibid., p. 6.

[28] Ibid., p. 10.

> Group life necessarily presupposes interaction between the group members; or put otherwise, a society consists of individuals interacting with one another . . . . The position of symbolic interactionism is that the 'worlds' that exist for human beings and for their groups are composed of 'objects' and that these objects are the product of symbolic interaction . . . .[29]
>
> Symbolic interactionism recognizes that human beings must have a makeup that fits the nature of social interaction. The human being is seen as an organism that not only responds to others on the non-symbolic level but as one that makes indications to others and interprets their indications . . . .[30]
>
> The capacity of the human-being to make indications to himself gives a distinctive character to human action. It means that the human individual confronts a world that he must interpret in order to act instead of an environment to which he responds because of his organization . . . .[31]
>
> . . . human group life consists of, and exists in, the fitting of lines of action to each other by the members of the group. Such articulation of line of action gives rise to and constitutes 'joint action'--a societal organization of conduct of different acts of diverse participants.[32]

Finally, Manis and Meltzer listed the basic theoretical assumptions of symbolic interactionism in the following way:

1. Mind, self, and society are most usefully viewed as processes of human and interhuman conduct.
2. Language is the mechanism for the rise of mind and self.
3. Mind is an importation of the social process, that is, of interaction, with the individual.

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[29] Ibid., p. 10.

[30] Ibid., p. 13.

[31] Ibid., p. 15.

[32] Ibid., pp. 16-17.

4. Human beings construct their behavior in the course of its execution, rather than responding mechanically to either external stimuli or such internal "forces" as drives, needs, or motives.

5. Human conduct is carried on primarily by the defining of situations in which one acts.

6. The socialization of the human being both enmeshes him in society and frees him from society. The individual with a self is not passive but can employ his self in an interaction which may result in behavior divergent from group definition.[33]

Mead's interpretation of human conduct as it has been embodied in symbolic interactionism was applied by Brookover and his associates to the school learning situation.

In carrying on the traditional view of Mead, Dewey, and others, Brookover stated that "It is not the actual behavior of others which directly determines an individual's action. Rather, it is the individual's interpretation of the expectations and acts of others which most influence his behavior."[34]

What Brookover is stressing is the point that the individual's behavior can best be understood from the perspective of the behaver. This position is also in accord with the perceptual theory of behavior as put forward by Combs and Snygg.[35] According to Combs and Snygg,

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[33] Manis and Meltzer, Symbolic Interactions: A . . . , p. 495.

[34] Brookover, et al., Self-Concept of Ability . . . , 1967, p. 5.

[35] Combs and Snygg, Individual Behavior: A . . . ,

the individual behaves in the light of his own interpretation of the world around him rather than others' interpretation, and from the point of view of the behaver himself, behavior is always meaningful; i.e., it has reason and purpose.[36] Moreover, the perceptual field influences the behavior of the individual, as phenomenologists emphasize.

> To the individual the causes of his behavior appear to be in the world around him and in his relation to it. As he experiences it, he eats, not because of stomach contractions, or a lowering of the sugar content of his blood . . . , but because he is hungry, or because he does not wish to disappoint his wife . . . .

The situation in which an individual might find himself is important to him. This situation is not the physical situation or the objective situation but the perceived situation, "the situation as it appears to the behaver."[37] According to Combs and Snygg, the perceptual field or phenomenal field of an individual is the

> entire universe, including himself, as it is experienced by the individual at the instant of action. It is each individual's personal and unique field of awareness, the field of perception responsible for his every behavior.

The perceptual field completely determines the behavior of the individual.

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[36] Ibid., p. 17.

[37] Ibid., p. 18.

> All behavior, without exception, is completely determined by, and pertinent to, the perceptual field of the behaving organism.[38]

Although the phenomenal field is fluid, its other characteristics are that it also has stability and direction. The perceptual field of an individual is always organized and an individual is

> constantly searching his field for details and meanings which will better enable him to satisfy need. This process involves a continual change in the perceptual field . . . . This process, from the point of view of the behaver, is one of increased awareness of details and is, therefore, called differentiation: it is through differentiations that change in the perceptual field and, hence, change in behavior occurs.[39]

Further, changes in an individual's own perceptual field are usually accompanied by changes in the behavior of others, which indicates to the individual that change has taken place in their perceptual fields. This recognition of the change in their phenomenal field by the individual makes the communication between them possible. That is, "Communication is possible through that part of the phenomenal field that is common to two persons." This common experience in the perceptual fields of the individuals is dependent upon the sociocultural milieu in which they are growing because "there is considerable agreement about the things they experience."[40]

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[38] Ibid., p. 20.

[39] Ibid., p. 29.

[40] Ibid., p. 31.

Brookover's Definition of Self-Concept and Definition of Self-Concept by Others

Brookover's definition of self-concept of ability should not be confused with others' definitions of self-concept or self. Concepts such as "self-reflective," "self-attitude," "self-communication," and "self--as an object" which have been used in a behavioristic tradition are pertinent to Brookover's use of the concept of self-concept of ability.[41]

Brookover defined the self-concept as "symbolic behavior in which the individual articulates a program of action for himself as an object in relation to others."[42] This definition is in line with the symbolic interactionist viewpoint; it emphasizes the self-other relationship.

A person has many self-concepts of his behavior. Brookover was interested in one such behavior, the learning behavior in the classroom situation. The child thus holds a self-concept of his learning ability in school, termed the self-concept of ability. This

> refers to behavior in which one indicates to himself (publicly or privately) his ability to achieve in academic tasks as compared with others engaged in the same task. We conceive of self-concept of ability as only one of many concepts of self. Other concepts of self refer to other areas of behavior which vary from that involving school performance.[43]

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[41] Brookover, et al., Self-Concept of Ability . . . , 1967, p. 7.

[42] Ibid., p. 8

[43] Ibid., p. 8.

A child may have different self-concepts, depending upon his pattern of association with others in different situations. He may also have many self-concepts of academic ability, depending upon the situation in which he finds himself. For example, a boy may have a low self-concept of ability when he is comparing himself with his boy friend, but a high self-concept of ability when he communicates with someone else. Similarly, a child who goes to school in a poor neighborhood may have a higher self-concept of ability when he refers himself to his friends from the same school, and a low self-concept of ability when he refers to a child who attends a better school in a wealthier neighborhood.

The self-concept of ability of a child may vary in different situations at different times. This does not mean there is no consistent pattern to an individual's self-concept responses. On the contrary, individuals tend to have relatively stable self-concepts.[44] This is so because they are capable of adjusting themselves to various situations, based upon their previous experiences and habits of action.

It may be observed that a person may define the situation in a similar way in different situations. This

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[44]John J. Bronfair, "Stability of the Self-Concept as a Diversion of Personality," Journal of Abnormal and Social Psychology, XLV (1952), 606.

does not mean that self-concept of ability exists apart from behavior in the form of trait or entity.

> Self-concept of academic ability does not refer to some underlying mental structure such as a phenomenological self, as defined by such theorists as Jerslid[45] or Maslow.[46] Rather it refers to symbolic behavior, and as such, to an empirical event. Thus when individuals publicly define their academic ability, we may observe what we refer to as self-concept of academic ability behavior. . . . Since the process of definition . . . is a language process, defining oneself is also public in that it employs a shared symbolic system. Self-concept of academic ability is the individual's assessment of his ability as expressed in the language of the community. We do not refer to some unidentified unit which may be presumed to be more 'real' than the language used by the person in assessing his ability. The definitions of self-concept of ability are determined by the public standard of the language shared by the community involved.[47]

In the symbolic interactionist tradition, the role of the language in the formulation of self and its definition is held to be crucial. Thus, the language employed by a person in defining his academic ability is ". . . classified as self-concept of academic ability behavior. Conversely, statements which do not publicly and literally refer to one's ability to carry out academic tasks with reference to others, such as statements of one's worthiness, desire, and aspiration are excluded."[48]

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[45]Arthur Jerslid, In Search of Self (New York: Bureau of Publication, Teacher's College, Columbia University, 1952).

[46]A. H. Maslow, "Self-Actualizing People: A Study of Psychological Health," Personality, Symposium No. 1 (1950), 11-34.

[47]Brookover, et al., Self-Concept of Ability . . . , 1967, p. 9.

[48]Ibid., p. 9.

It should be pointed out here that personality theorists have long been interested in such verbalization as worthiness, desire etc., that people make about themselves.[49] But in the symbolic interactionist frame of reference, self-concept of academic ability strictly refers to language behaviors which are strictly symbolic behaviors. Such conceptualization of self-concept of ability renders language behaviors as empirical events which are being constructed and reconstructed.

This, in keeping with the tradition of the symbolic interactionist, is to say that the self is not a thing but a behavioral process. In this sense it is conceived as a verb and not a noun or an adjective.[50]

The conceptualization of the self-concept of ability as a verb has been criticized by Snygg and others as being only a self-report.[51] The accuracy or inaccuracy of the individual's reports about his self-concept of ability is not so important. What is important, it is

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[49] L. P. Lipsitt, "A Self-Concept Scale for Children and Its Relationship to the Children's Form of the Manifest Anxiety Scale," Child Development, XXIX,4 (December, 1958), 463.

[50] Brookover, et al., Self-Concept of Ability . . . , 1967, p. 25.

[51] Arthur W. Combs and Daniel W. Soper, The Relationship of Child Perceptions to Achievement and Behavior in the Early School Years, Cooperative Research Project No. 814 (Gainesville: University of Florida, 1963), p. 6; A. W. Combs and D. W. Soper, "The Self, Its Derivate Terms and Research," Journal of Individual Psychology, XIII (1957), 133-145; A. W. Combs, D. W. Soper and C. C. Courson, "The Measurement of Self Concept and Self Report," Educational and Psychological Measurements, XXIII (1963), 493-500.

maintained, is the tremendous effect of an individual's self-concept on his decision-making process. Although the Michigan State General Self-Concept of Ability Scale, constructed by Brookover in 1962, is a self-report, it has proven to be much more promising in its use than many other instruments,[52] and is more effective and consistent in predicting children's academic achievement than are many other scholastic aptitude tests.[53] There is some evidence that in an interview situation the self-concept report of children corresponds closely to their ratings of themselves on some personality instruments.[54]

Self-Concept: An Intervening and a Threshold Variable

Within the general frame of reference of symbolic interactionism, self-concept is used as an intervening variable; i.e., as "any intervening construct with

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[52] D. A. Biggs and D. J. Tinsly, "Student-Made Academic Predictions," The Journal of Educational Research, LXIII,5 (January, 1970), 197.

[53] Laurabeth Grieneeks, "Measures of Self-Perception as Predictors of Scholastic Achievement," The Journal of Educational Research, LXIII,5 (January 1970), 203.

[54] R. E. Bills, "Acceptance of Self as Measured by Interviews and the Index of Adjustment and Values," Journal of Consulting Psychology, XVIII,1 (1954), 22; W. B. Walsh, "Validity of Self-Report," Journal of Counseling Psychology, XIV,1 (Jan., 1967), 22; and W. B. Walsh, "Validity of Self Report: Another Look," Journal of Counseling Psychology, XV,2 (March 1968), 186.

a maximum amount of operational validity, or direct empirical reference."[55] Brookover elaborated on Marx's writing, and further stated that:

> In this context, the self is the intervening variable between the normative patterns of the social group or the role expectations held by significant others, on the one hand, and the learning of the individual, on the other. We hypothesize that, for the expectations of others to be functional in a particular individual's behavior, they must be internalized and become part of the person's conception of himself. Although we recognize the relevance of self in all aspects of human behavior, our interest at this point is in a particular aspect of self as it functions in the school learning situation. We postulate that the child acquires, by taking the role of others, a perception of his own ability as a learner of the various types of skills and subjects which constitute the school curriculum. If the child perceives, that he is unable to learn mathematics or some other area of behavior, this self-concept of his ability becomes the functionally limiting factor of his school achievement. "Functional limit" is the term used to emphasize that we are speaking not of genetic organic limits on learning but rather of those perceptions of what is appropriate, desirable, and possible for the individual to learn. We postulate the latter as the limits that actually operate, within broader organic limits, in determining the nature or extent of the particular behavior learned.[56]

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[55] Melvin H. Marx, "Intervening Variable or Hypothetical Construct," The Psychological Review, LVIII (1951), 236.

[56] Brookover and Gottlieb, A Sociology of . . . , p. 469; For different types of symbolic interaction theory and how the antecedent variables are conceived, see Kuhn, "Major Trend in . . . ," p. 50.

Beneath the proposition that the self-concept of ability is an intervening variable lie several implicit assumptions.[57] It is believed that the student's own perception of his academic ability is influenced by the definition of others about him. This does not mean that others influence his academic behavior directly. The definition by others of the student as learner, in fact, is believed to affect the student's own definition as a learner, i.e., his self-concept of ability, and this, in turn, affects his behavior as a learner. This belief is fundamentally in line with the theoretical assumptions of the symbolic interactionist, who sees man as continuously involved in self-definition and evaluation in the process of interaction with others. An individual, as a student, takes into consideration the expectations of others, but in the final analysis acts according to his own definition of the situation. Thus, the relationship between self-concept of ability of the student and his behavior in school, i.e., his achievement in school subjects, is conceived as "a necessary but not a sufficient condition."[58]

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[57] Brookover, et al., Self-Concept of Ability . . . , 1967, pp. 12-13.

[58] Ibid., p. 12.

Also, the concept of self-concept of ability is a "threshold concept" insofar as it functions in such a way as to govern the behavior of a child as a learner.[59] This means it is possible that a child's definition as a learner may impose limits on his effort to learn. Within the boundary of the limit set by a child as a learner, such factors as language development and specific role identities "are assumed to determine the level of academic accomplishment attempted. Self-concept of ability functions to limit the learning attempted; it does not account for variations in achievement within those limits."[60] For example, a child as a learner in a school situation may think there are several types of behavior which are appropriate and are expected of him; let it be assumed that he is expected to be good in sports, to do well on tests, to get along well with others, and so forth. But in the school situation he may think that getting along with others is the most important behavior for him, and thus make more effort in this area of his behavior than others.

The above observation brings into focus a fundamental point related to the prevailing roles in a sociocultural milieu. The linear level of association

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[59]David E. Lavin, The Prediction of Academic Performance (New York: Russell Sage Foundation, 1965), Chapter III.

[60]Brookover, et al., Self-Concept of Ability . . . , 1967, p. 12.

between self-concept of ability and achievement in school will be high if in the prevailing sociocultural milieu children learn to do well in school, that will depend on whether or not others in the environment not only teach children that they should do well in schools but expect them to do well.[61] For example, in most societies, children may find themselves in a dilemma when they learn from others with whom they associate in the society that they must go to school and, at the same time, are told that only a few of them are capable of achieving well in school.

With a few exceptions, almost everyone in society learns the expected roles such as language, sex roles, and occupational roles. Informal socialization is obviously a much more effective form of teaching than formal education. Among the factors that contribute to its success are the fact that all members of society expect all other members of society to learn certain types of behavior, and the failure to do so is met with consistent disapproval, not just from a teacher but from everyone.[62]

Is there any reason why learning a language and appropriate dress should be almost universal accomplishments while the successful learning of academic subjects

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[61] Brookover noted that "To conceptualize self-concept of ability as a threshold variable in its relationship to academic achievement while having a linear relationship with perceived evaluations presents methodological problems not commonly treated. The usual correlational procedures are inadequate," Ibid., p. 13.

[62] Brookover and Erickson, Society, Schools and . . . , pp. 29-31.

is not? How does the process of learning mathematics, English, history, and other subjects differ from the process of learning one's culture?

> The effectiveness of the informal socialization process in non-academic types of behavior leads us to hypothesize that academic behavior would be learned in the same manner if similar patterns of expectation and processes of teaching were employed. Perhaps algebra behavior would be as universally and effectively learned as the colloquial language is in every society if the same processes of socialization were applied to algebra as are to the local language.[63]

In a complex and highly stratified society, ideological and subcultural variations lead to differential normative expectations, which in turn may affect the learning behavior of children in that group.[64]

Student Role Relationships

It has been stated that a student's self-concept of academic ability and his perception of other's evaluation of him as a learner are associated with his achievement in school. This statement does not imply that the two factors are prescriptive or normative in nature. Rather, it is assumed that if the student is to attempt to achieve well he must expect from himself high achievement.

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[63] Ibid., pp. 32-33.

[64] For discussion of the problem see Brookover and Erickson, Ibid., "Subcultural Diversity and School Learning," pp. 56-59. For different images of society, expectations and ideologies held by people and their influence on various social processes, see, A. L. Strauss, The Contexts of Social Mobility (Chicago: Aldine Publishing Company, 1971).

That is to say, he must define the situation in relation to others so that his plan of action culminates in attempting to achieve well in mathematics, for example. He must also perceive that others expect him and want him to achieve well in mathematics.

It is further assumed that a student "may maintain a common set of role expectancies centering upon his being defined as a 'student'" as he enters into the interaction process with significant others.[65]

It is held that the student's relationship with significant others is a "reciprocal role relationship" which exists when the student ". . . enacts a social role which is defined with reference to another (reciprocal) role, as in relationship between patient and doctor . . .," or student and teacher, student and parents.[66] In the process of interaction with others, the student learns that his role relationship with them requires reciprocity of action. He learns that as a student those others with whom he wants to maintain a relationship expect him to achieve well in mathematics, for example. This he must do--it is an obligation on his part, unless he wants to take the risk and jeopardize his relationship with others.

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[65]Brookover, et al., Self-Concept of Ability. . .,1967, p. 15. Also see, Merton, Social Theory and . . . , p. 369; Linton, The Study of . . . , p. 113; and Carl Cough and John Murray, "Significant Others and Evaluations," Sociometry, XXII (1964), 502.

[66]Herbert C. Kelman, "Processes of Opinion Change," Public Opinion Quarterly, XXV (Spring, 1961), 64.

Kelman stated that ". . . if an individual finds a particular relationship satisfying, he will tend to behave in such a way as to meet the expectations of the other."[67] The selection of satisfying relationships depends, of course, upon the student's perception of the reciprocity of that role relationship.[68]

What are, then, the pertinent questions which must be raised in understanding the self-concept of ability of a student and his perception of others' definitions about him as a learner? To answer the question one must ask: What are those reciprocal-role relationships which an adolescent has? Do these reciprocal-role relationships influence a student's academic behavior? What specific relationships are maintained by meeting the obligation of academic achievement by a student?

The last question has a particular relevance here. It implies that in order to understand an individual's academic behavior those reciprocal relationships which center on the expectation of others about an individual as a learner must be determined.

There is another related way to understand behavior of an individual as a learner. The student takes into account the definitions of significant others in organizing

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[67]Ibid., p. 64.

[68]Brookover, et al., Self-Concept of Ability. . ., 1967, p. 16.

his own plan of action in a given situation. The notion of "surveillance" as advanced by Lindesmith and Strauss is relevant here. This notion implies that an individual ". . . regulates his behavior in terms of these supposed opinions and attitudes of others. He imagines what 'people' would say 'if they know' or what they will say 'when they know'."[69] Taking account of this position, Brookover added to it by saying that "under conditions of perceived surveillance it is believed that parents, friends, and teachers will have their greatest influence over the academic behavior of the student."[70] He continued:

> Students take into account in their decision those who they think are concerned about their behavior as students. When a role relationship is valued by a student and he perceives that others in that relationship are concerned about how he behaves in school, a reciprocal relationship exists. Therefore, information about who students think of as being important in their lives along with information about who students tend to view as being concerned with their academic behavior is pertinent . . .[71]

The discussion of the student role-relationship falls into the general perspective of reference group theory. The concept of the reference group was coined by Hyman in social psychology in the 1940's.[72] This concept

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[69]Alfred R. Lindesmith and A. L. Strauss, Social Psychology, ed. (New York: The Dryden Press, 1959), p. 394.

[70]Brookover, et al., Self-Concept of Ability . . . , 1967, p. 16.

[71]Ibid., pp. 16-17.

[72]Hyman, "The Psychology of . . . ,"

and reference group theory were further developed by Newcomb,[73] Merton and Kilt,[74] Kelly,[75] Brookover[76] and others.[77]

The concept of reference group has been used by various researchers in various ways, and much confusion has arisen for two reasons: (1) the vagueness of the significance of the concept of reference group, and (2) inconsistent and sometimes contradictory formal definitions. Shibutani, in his examination of current literature dealing with the concept of reference group, disclosed that it has been used in three distinct ways: (1) Reference group is considered as that group which serves as a comparison point for actors; (2) It is the group to which actors aspire; and (3) It is that group whose frame of reference is assured by actors.[78] Similarly, noting the ambiguities in

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[73] T. H. Newcomb, Social Psychology (New York: Harpers, 1958).

[74] R. K. Merton and A. S. Kitt, "Contributions to the Theory of Reference Group Behavior," in Continuties in Social Research, ed. by R. K. Merton and P. F. Lazarsfeld (Glencoe: Free Press, 1950).

[75] H. H. Kelly, "Attitudes and Judgments as Influenced by Reference Groups," in Readings in Social Psychology, ed. by Guy Swanson (New York: Henry Holt and Co., 1952).

[76] Brookover and Gottlieb, Sociology of Education . . . , Chapter XVI. In this chapter the writers discuss the importance of role theory upon "student role" in detail.

[77] Tomotsu Shibutani, "Reference Groups as Perspectives," American Journal of Sociology, LX (May, 1955), 562-569. Kuhn, "The Reference Group Reconsidered," The Sociological Quarterly, V (Winter, 1964), 6-21.

[78] Shibutani, "Reference Groups as . . . ," in Manis and Meltzer, Symbolic Interaction: A . . . , pp. 159-60.

in the use of this concept, Kuhn proposed a new concept of "The orientation other," which "refers to a social object which may be a single other or a group" and has four defining attributes:

1. The term refers to the others to whom the individual is most fully, broadly and basically committed, emotionally and psychologically;

2. it refers to the others who have provided him with his general vocabulary, including his most basic and crucial concept and categories;

3. it refers to the others who have provided and continue to provide him with his categories of self and others and with the meaningful roles to which such assignments refer;

4. it refers to the others in communication with whom his self-conception is basically sustained and/or changed.[79]

Two things should be noted here. First, one of the pressing concerns in the literature dealing with the reference group theory is with identifying the significant others who provide the subject with norms and values which serve as his point of comparison and aspiration. Second, in the frame of reference of the symbolic interactionist, Mead, Dewey, and Cooley emphasized the role of others in the development of self and meaning. Mead's notion of taking the role of the other was similar to Cooley's notion of internally imagined others. In fact, all those who emphasize the social origin of the self take into

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[79]Manford H. Kuhn, "The Reference Group Reconcidered," in Manis and Meltzer, ed., Symbolic Ineraction. . ., p. 181.

consideration the crucial role played by others in the process.[80] Mead's concept of "generalized others" is relevant in the general discussion of role theory. However, Brookover did not incorporate Mead's notion of "generalized others" in his self-concept theory, but refined the notion by taking into account the point which C. W. Mills brought to the fore.[81] Mills pointed out that it is not all others in the situation who guide one's behavior and whose definition an individual takes into consideration. Rather, it is the significant others' definition that he takes into account. Brookover asserted "that parents and friends make up both membership and reference groups for the adolescent."

In making reference to "taking the role of the generalized other," Mead meant that each person looks at the world from the perspective of the culture of the group of which one is a member. Within the limit set by his cultural milieu, the individual interacts with others and in the process comes to learn to perceive, think, form judgments, and control his action. The generalized perspective of others which he shares also aids him in defining his objects, other people, the world, and himself. It

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[80] Harry S. Sullivan, Conceptions of Modern Psychiatry (Washington, D.C.: William Alanson White Psychiatric Foundation, 1947); Karen Horney, Self Analysis (New York: Norton, 1942); E. R. Hilgard, "Human Motives and the Concept of Self," American Psychologist, 4:9 (September, 1949).

[81] Brookover, et al., Self-Concept of Ability . . . , 1967, p. 14.

also helps him in visualizing and articulating his line of action from the standpoint of generalized others. His plan of action involves anticipating the reactions of others, resisting his undesirable impulses, and guiding his conduct. The socialized person, in the Meadian frame of reference, is the one who conforms to the norms and values of others by defining each situation properly and by meeting his obligations in each of the situations he encounters. In doing so he controls his personal conduct from the viewpoints of others and expects that others would also govern their conduct in the same manner.

Chapter III contains a selective review of the literature on self-concept, and thus explores in more detail the concept itself and its implications for a theory of learning in school.

CHAPTER III

REVIEW OF SELECTED LITERATURE

Introduction

In Chapter I it was pointed out that educators and social scientists generally tend to explain variations in school learning within the frame of reference of the fixed ability model and psychometry (mental measurement or intelligence testing.) It was suggested that the basic assumptions of psychometry are restrictive in scope and usefulness for meeting the needs of contemporary societies; they are also restrictive of the aspirations and expectations of various groups of people. Moreover, psychometric theory and practice are based upon ideas which cannot stand the recent evidence produced by the work of such noted scholars as J. McV Hunt,[1] Milton Schwebel,[2] Jerome Bruner,[3] and D. A. Pidgeon.[4] The work of these men has led to an entirely new appraisal of human

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[1]Hunt, Intelligence and Experience. . .

[2]Schwebel, Who can be . . .

[3]Jerome Bruner, The Process of Education (New York: Vintage Books, 1960).

[4]D. A. Pidgeon, "Intelligence Testing and Comprehensive Education," in Genetic and Environment Factors in Human Ability, ed. by J. F. Meade and A. S. Parkers (Edinburgh, London: Oliver and Boyd, 1966).

potentialities and learning. All of them found enough reason to believe that human intelligence is developed in social experience.[5]

In this chapter, a review of selected studies on self-concept is presented. The review of literature is organized under two main headings: (1) Self-concept as a theoretical construct. The discussion under this heading attempts to clarify the way self-concept as a theoretical construct has been defined and used by various researchers; and (2) Self-concept as it relates to achievement in schools. Under this heading selected studies which bear directly upon the basic hypotheses stated in Chapter I are discussed.

The critical review of self-concept research presented in this chapter is basically drawn from Brookover, et al.;[6] Ahmad Sidawi;[7] James C. Votruba;[8] and Perry Zirkel.[9]

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[5]Brian, Intelligence, Psychology and . . .

[6]Brookover, et al., Self-Concept of Ability. . . , 1962, pp. 7-13; Brookover, et al, Self-Concept of Ability . . . , 1965, pp. 15-28; Brookover, et al., Self-Concept of Ability . . . , 1967, pp. 17-43.

[7]Sidawi, "Self-Concept of Ability . . . ," pp. 395-6.

[8]Votruba, "A Comparative Analysis . . . ," pp. 10-26.

[9]Perry A. Zirkel, "Self-Concept and the 'Disadvantage' of Ethnic Group Membership and Mixture," Review of Educational Research, XLI,3 (1971), 211-225. Zirkel's review extends Wylie's and Brookover's review of literature on self-concept because it is specifically focused on the empirical studies which relate self-concept to ethnic group membership; Wylie's landmark review on self-concept did not include this.

Zirkel's review of self-concept research is the most recent one. This review of literature should throw further light on how the theoretical frame of reference of this study, presented in Chapter II, enhances the understanding of variability in learning among children in schools and thus, unlike the fixed ability approach, complements other theories of learning which focus on the process of interaction between the individual learner and others in his sociocultural environment.

A most comprehensive and critical review of research on self-concept was completed by Ruth C. Wylie and others. Among other things, she found that research on self-concept shows a lack of consistency, clarity, and completeness which is due to a "bewildering array" of definitions, instruments, and research designs.[10]

Wylie summarized the status of self-concept theory in relation to social interactionism. She pointed out that:

> Conceivably there are a number of general ways in which social interaction and self-concept might be related. Perhaps the most obvious and important possibility is that one's self-concept is shaped through interaction with others . . . . However, propositions of this kind have not been developed explicitly enough to point clearly towards definitive, empirical tests. Perhaps partly as a result of such vagueness, this theoretically crucial class of relationships between variables has been inadequately explored.[11]

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[10] Ruth C. Wylie , The Self-Concept (Lincoln, Nebraska: University of Nebraska Press, 1961), p. 2; Also see, D. D. Crowne and M. W. Stephens, "Self-Acceptance and Self-Evaluative Behavior: A Critique of Methodology," Psychological Bulletin, LVIII (1961), 104-121.

[11] Wylie, The Self Concept. . . , pp. 136-159.

Brookover and his associates reviewed the literature on self-concept which appeared between 1962 and 1967 and came to a similar conclusion. "Literally hundreds of studies have been done on self-concept and reported in the educational, sociological and psychological literature. Yet few of these studies can be replicated because of either poor methodology or unclear conceptualization, or usually both."[12]

The review of literature on self-concept and the criticism of studies on self-concept were specifically completed by Brookover and his associates "from the standpoint of the theory behind the research project [self-concept of academic ability and school achievement] namely, Meadian social behaviorism or its refinement--symbolic interactionism." Their critique of self-concept studies and methodology "focuses upon the way 'self-concept' as a theoretical construct is used and defined by researchers."[13]

Self-Concept as a Theoretical Construct

Definition of Self-Concept and Self Antecedents

The fact that there are many definitions of self-concept and related constructs was pointed out by Wylie,[14]

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[12]Brookover, et al., Self-Concept of Ability . . . , 1967, p. 20. A review of literature on self-concept which appeared during April 1963 to 1967 is included in Brookover, et al, ibid., pp. 17-43. A review of self-concept studies prior to that day may be found in Brookover, et al., Self-Concept of Ability . . . , 1962, pp. 7-12.

[13]Brookover, et al., Self-Concept of Ability . . . , 1967, pp. 17-18

[14]Wylie, The Self-Concept . . . , p. 2.

Brookover,[15] and Zirkel.[16] Brookover, et al. pointed out that the confusion in understanding the definition of self-concept is created because researchers often use the term "self-concept" in the title of their studies which, in fact, are investigating such subjects as conformity, ambition, adjustment, physical ability, physical appearance, or social virtues.[17] Furthermore, overlapping terms such as self-esteem,[18] self-image,[19] self-perception,[20] self-report,[21] and sense of personal worth[22] confuse the

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[15] Brookover, et al., Self-Concept of Ability . . . , 1967, p. 19.

[16] Zirkel, "Self-Concept and the . . . ," p. 216.

[17] Brookover, et al., Self-Concept of Ability . . . , 1967, p. 19.

[18] B. F. Meketon, "The Effects of Integration upon the Negro Child's Responses to Various Tasks and Upon His Level of Self-Esteem" (unpublished Doctoral dissertation, University of Kentucky, 1966), Dissertation Abstracts, XXX (1969), 2339 A-2340 A.

[19] M. Lansman, "The Relationship of Self-Image to Negro Achievement and Attendance in a Racially Integrated Elementary School" (unpublished Doctoral dissertation, New York University, 1968), Dissertation Abstracts, XXIX (1968), 442A-443A.

[20] A. T. Soares and L. M. Soares, "A Comparative Study of the Self-Perceptions of Disadvantaged Children in Elementary and Secondary Schools," Proceedings of the 74th Annual Convention of the American Psychological Association, IV (1969), 659-660.

[21] P. P. Yeatts, "An Analysis of Developmental Changes in the Self-Report of Negro and White Children, Grades Three Thru Twelve" (unpublished Doctoral dissertation, University of Florida, 1967), Dissertation Abstracts, XXIX (1968), 823.

[22] H. F. Butts, "Skin Color Perception and Self-Esteem," Journal of Negro Education, XXII (1963), 123-128.

definition of self-concept. Finally, the confusion is created because of "the distinction between multi-and unidimensional definitions of self-concept."[23] For these reasons, some researchers have suggested that "self-concept" as a relevant variable in understanding such behavior as achievement in school or dropping out of school should be discarded.[24] It is therefore vital that self-concept as a variable should be more carefully defined and research designs should be based upon a sound theoretical frame of reference which would allow for replicative studies in the future.

Social scientists also disagree about the origin of the self. Most of them tend to agree that it is social in origin, although each person has his own individual self.[25] The development of self-image has been traced by some authors to an early age.[26] Within the frame of reference of Meadian social psychology, a child develops his own self-definition and the definitions of objects around him by learning and internalizing the symbols used by others around him. In Mead's view, society exists prior to self, and self emerges

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[23]Zirkel, "Self-Concept and the. . . ," p. 216.

[24]R. E. Beaird, "Self-Concept as Related to Adolescent School Drop Outs," Dissertation Abstracts, XXV,10 (April, 1965), 5724.

[25]A. T. Jersild, In Search of Self (New York: Bureau of Publication, Teachers' College, Columbia University, 1952).

[26]See, J. C. Dixon, "Development of Self-Recognition," Journal of Genetic Psychology, XCL (December, 1957), 251-256, in J. J. Gordon and A. W. Combs, "The Learner: Self and Perception," Review of Educational Research, XXVIII,5 (December, 1958), 433.

in the context of society. The development of the self follows the development of the ability of the individual to take the roles of others in a process of social communication. The self emerges in the process of interacting with others. The importance of the self-other relation in the development of self-concept has already been discussed in Chapter II.

The social origin of the self has been emphasized by other authors such as Karen Horney[27] and Harry Stack Sullivan.[28] According to Hilgard, "The self is thus a product of interpersonal influences . . . I am inclined to believe that the self, as a social product, has full meaning only when expressed in social interaction."[29]

Self-Concept: Is it a Process or a Fixed Trait?

In most of the studies on self-concept, researchers have generally assumed that self-concept is a fixed trait possessed by individuals; i.e., most of them have conceptualized self-concept as an inner and intrapersonal trait "which an individual brings to the educational setting."[30]

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[27]Horney, Self Analysis. . .

[28]Sullivan, Conceptions of Modern . . .

[29]E. R. Hilgard, "Human Motives and the Concept of Self," American Psychologists, IV,9 (September, 1949), 379.

[30]John K. Tuel and Rosemary Wursten's study is one example of those studies which are based upon such an assumption about self-concept. See, John K. Tuel and Rosemary Wursten, "The Influence of Intra-Personal Variables on Academic Achievement," California Journal of Educational Research, XVI, 16 (March, 1965), 58-64.

But, from the Meadian perspective, the perspective of the present study, "Self is a process rather than a thing, a verb rather than a noun, and by no means a fixed trait lugged around by the 'learner'. Self is conceptualized as a label referring to certain symbolic behaviors in which individuals engage."[31]

Self-Concept: Global or General vs. Specific

Researchers in the area of self-concept have concerned themselves with the problematic distinction between global or general self-concept and specific self-concepts.[32] Global self-concept implies over-all personal perception in a broader social context, whereas specific self-concept is restricted to a relatively narrower social setting. For example, in the social context of school, a student's school-related self-concepts (e.g., "My grades are good," "I am a good student in physics, but poor in English," "I am accurate in my school work.") may be expected to more closely relate to his performance in school than the correlation between other dimensions of self-concepts (e.g., "I am very handsome," "I am well-behaved," "I am popular.") and performance in school

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[31] Brookover, et al., Self-Concept of Ability . . . , 1967, p. 23.

[32] Zirkel, "Self-Concept and the. . . ," p. 216.

subjects. "On logical grounds, items which assess specific academic self-conceptions ought to be superior to general self-perception items when school achievement is to be predicted."[33]

Similarly, in her review of self-concept studies, Ruth Wylie found that

> Most of the hundreds of researchers aimed at studying self-regard are apparently based on the assumption that individual differences exist in an over-all or global self-evaluative attitude . . . Even if a 'g' factor were to be demonstrated and a variety of instruments used, it seems clear that such a factor can account for only a small part of the variance in the instruments.[34]

Thus, Wylie explored "children's estimates of their ability to do school work,"[35] which is a more restricted aspect of self-evaluation. Brookover's concept of self-concept of academic ability is in accord with Wylie's notion of more restricted aspects of self-evaluation.[36]

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[33]Brookover, et al., Self-Concept of Ability . . . , 1967, p. 23.

[34]Wylie, The Self-Concept . . . , cited in Brookover, et al., Self-Concept of Ability . . . , 1967, p. 21.

[35]Ibid.

[36]Brookover, et al., Self-Concept of Ability . . . , 1967, p. 21.

In concluding, a review of studies by Craig,[37] Piers and Harris,[38] Nash,[39] and Wickersham,[40] Brookover wrote:

> It seems reasonable to conclude that the small observed associations commonly found between general self-perceptions and school achievement are primarily the result of the association between academic self-perceptions (known to be highly correlated with achivement) and general self-perceptions. In fact . . . if one controlled for the academic dimension of self-concept the association between general measures of self-concept and GPA (grade point average) will drop to zero.[41]

Self-Concept: Is it Real or Ideal?

In the literature on self-concept, many researchers tend to think there is a difference between what a person thinks he is capable of doing (his ideal self-concept) and what he can actually do (his real self-concept). For example, a student with an I.Q. score of 90 may think he is capable of finishing studies in college, but his counselor

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[37]Helen B. Craig, "A Sociometric Investigation of the Self-Concept of the Deaf Child," American Annals of the Deaf, CX,4 (1965), 456-478.

[38]Ellen V. Piers and Dale B. Harris, "Age and Other Correlates of Self-Concept in Children," Journal of Educational Psychology, LV,2 (1964), 91-95.

[39]Ralph J. Nash, "A Study of Particular Self-Perceptions as Related to Scholastic Achievement of Junior High School Age Pupils in a Middle Class Community," Dissertation Abstracts, XXIV,9 (1964), 3837-3838.

[40]Janet M. Wickersham, "Self-Perceptions, in Relation to Grades and Report Cards, of Third and Sixth Grade Children From Above Average Socioeconomic Backgrounds in Richmond and Wayne Township," Dissertation Abstracts, XXVI,6 (December, 1965), 3116-3117.

[41]Brookover, et al., Self-Concept of Ability . . . , 1967, p. 24.

may define the student's self-concept in this situation as "ideal" and not "real." Thus a concern for incongruities or discrepancies between the "real-self," "ideal-self," and a stated "real-self" is frequently shown in the research on self-concept.[42] Similarly, other writers have pointed out discrepancies between self-expectations and the perceptions of others' expectations.[43]

The above trend in self-concept research represents a clinical concern. It implies that the presence of discrepancies between an individual's "real-self" and his "ideal-self" is an indication of conflict and maladjustment, and may be undesirable or harmful.[44]

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[42]See J. E. Williams, "Changes in Self and Other Perceptions Following Brief Educational-Vocational Counseling," Journal of Counseling Psychology, IX (1962), 18-30; Clifford D. Miller, "An Exploratory Investigation of Self-Concepts of High Achieving, Average Achieving, and Low Achieving Groups of Junior High Pupils as Perceived by Pupils and Their Teachers," Dissertation Abstracts, XXVI,3 (September, 1965), 1483-1484; Mildred T. Richardson, "Discrepancy Measurements Relating Students' Self-Concept of Mental Ability with Mental Health Stability, and Empirical Study of Ninth Graders," Dissertation Abstracts, XXVI, 5 (November, 1965), 2592.

[43]Mary C. Davis, "Vocational Choice and Self-Others' Expectations Congruence as a Function of Ego Identity," Dissertation Abstracts, XXVI, 2 (1965), 1168; Richardson, "Discrepancy Measurements Relating . . . ."

[44]B. Berelson and G. A. Steiner, Human Behavior: An Inventory of Scientific Findings (New York: Harcourt, Brace and World, 1964), p. 291.

On the other hand, one may argue that such discrepancies may be necessary to arouse strong motivational forces to act in certain directions, and that such action may not be possible otherwise. For children who are growing up under the influence of multiple others in schools and elsewhere, the differences between real-ideal self may be a natural indication of growth and development.[45] But the variation between what individuals regard as the "ideal-self" and the "real-self" may not be so great if they are growing up in the same socio-cultural environment.[46]

According to the theoretical orientation developed by Brookover and his associates,

> both 'ideal' self and 'real' self are behaviors which emerge in social discourse with self and others. A comprehensive description of the sources of 'ideal' self, if we were to use the term, would include the normative prescriptions perceived by the actor as occurring within his primary and secondary groups. Hence, 'ideal' self as well as 'real' self would likely correspond with cultural boundaries.
> . . . . . .
> If the assumption is true that self-concepts emerge

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[45]H. V. Perkins, "Factors Influencing Change in Children's Self-Concepts," Child Development, XXIX, 2 (June, 1958), 230.

[46]Merville C. Shaw and Gerald J. Alves, "Guidance in Practice: The Self-Concept of Bright Academic Underachievers," Personnel and Guidance Journal, XXXXII, 4 (1964), 401-403; Densley H. Palmer, "A Comparison of the Consistency of the Self-Judgments of Physically Disabled and Non-disabled Male College Students," Dissertation Abstracts, XVI, 8 (February, 1966), 4456.

> through a process of language interaction in which the person takes into account how he is defined by others, and if all others in the life of a person provided similar definitions of a person, we would anticipate a low discrepency between 'real' and 'ideal' self.[47]

Moreover, "The research literature is less than clear on how these discrepancies cause the harm that is assumed to result from them."[48] Measured discrepancies between the "real" self and "ideal" do not seem to affect actual performance.[49] Academic achievement is not related to such discrepancies.[50]

> In spite of the long tradition of research on this subject, no one has demonstrated conclusively that poorer school achievement, poor mental health, or poor anything is a consequence or even a concomitant of a discrepancy between stated 'real' and stated 'ideal' self concepts,

asserted Brookover.[51]

> Within our theoretical perspectives, there is no 'real' self entity apart from behavior. . . . When a person says 'I am . . . ' or 'I would like to be . . . ,' these are 'real behavioral events [because they are symbolic behavior] no less worthy of study than any other behavioral events.[52]

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[47] Brookover, et al, Self-Concept of Ability . . . , 1967, pp. 26-27.

[48] Ibid., p. 26.

[49] M. Moses and R. Duvell, "Depreciation and the Self Concept," Journal of Clinical Psychology, XVI, 4 (October, 1960), 388.

[50] F. M. Jervis, "The Meaning of a Passive Self-Concept," Journal of Clinical Psychology, XV, 4 (October, 1959), 372.

[51] Brookover, et al., Self-Concept of Ability . . . , 1967, p. 26.

[52] Ibid., p. 25.

Self-Concept as it Relates to Achievement in Schools

In this section, a review of selected studies which bear directly upon the basic hypotheses stated in Chapter I is presented.

One of the major hypotheses stated in Chapter I was that self-concept of academic ability is associated with academic achievement. This hypothesis was based upon the assumption that an individual's self-concept can affect his performance and behavior. Several studies have established the relationship between self-concept and behavior.[53] A positive correlation between general self-concept and high achievement was reported by Renzaglia[54] and Reeder,[55] who examined correlates of self-structure by using general personality traits to determine self-concept. Their method, however, did not directly tap the students' self-concepts as learners, which is the focus of the present study. The role of self-concept in achievement in a task-oriented situation

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[53] See Thomas S. McPartland, John H. Cumming, and Wynona Ganetson, "Self-Conception and Ward Behavior in Two Psychiatric Hospitals," Sociometry, XXIV (1961), 11-14; and Walter C. Reckless, Simion Dinitz, and Ellen Murray, "Self-Concept as an Insulator Against Delinquency," American Sociological Review, XXI (1956), 744-746.

[54] G. A. Renzaglia, "Some Correlates of the Self-STructure as Measured by an Index of Adjustment and Values" (unpublished Ph.D. dissertation, University of Minnesota, 1952), cited by Wylie, The Self-Concept . . . , p. 72.

[55] Thelma A. Reeder, "A Study of Some Relationships Between Level of Self-Concept, Academic Achievement and Classroom Adjustment," Dissertation Abstracts, XV (1955, 2472.

was investigated by Roth. On the basis of the results of his study, Roth concluded that ". . . in terms of their conception of self, individuals have a definite investment to perform as they do. With all things being equal, those who do not achieve choose not to do so, while those who do achieve, choose to do so."[56] Further evidence on the relationship between positive self-concept and school achievement was offered by Coopersmith, who found the correlation of .36 between the above variables in a group of 102 fifth and sixth grade children.[57] Supporting evidence was reported by Bodwin, who studied the relationship between immature self-concepts and reading abilities in the third and in the sixth grades, and found a positive correlation of .72 and .62 between the above two variables, respectively.[58]

In Chapter I of the present study it was also hypothesized that a student's self-concept of academic ability would be affected by his perception of the evaluation which significant others hold of him as a learner. Basic to this hypothesis is the assumption "that people significant

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[56]R. M. Roth, "Role of Self-Concept in Achievement," Journal of Experimental Education, XXVII (June, 1959), 265-281.

[57]S. Coopersmith, "A Method for Determining Types of Self-Esteem," Journal of Educational Research, LIX (1959), 87-94.

[58]F. B. Bodwin, "The Relationship Between Immature Self-Concept and Certain Educational Disabilities" (unpublished Ph.D. dissertation, Michigan State University, 1957), p. 77.

or important to another person can profoundly influence that person's concept of self."[59] Various studies provide support for this theoretical position.

For example, Videbeck's experiment supports the proposition "that self-conceptions are learned and that the evaluative reactions of others play a significant part in the learning process."[60] Videbeck in his study demonstrated that a person's self-rating was significantly changed in the hypothesized direction after one critique by an evaluator. Further evidence was offered by Rosen, Levinger, and Lippitt, who studied the effect of group-related determinants on desire for change; and reported that a person's desire for change was positively related to the wishes of others for him.[61] Clarke investigated the relationship between college academic performance and expectancies and reported a positive relationship between a student's academic performance and the academic expectations held by his significant others as perceived by him.[62] Staines' study demonstrated that the self-concepts

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[59]Brookover, et al, Self-Concept of Ability. . . , 1962, p. 10.

[60]Richard Videbeck, "Self-Conception and the Reaction of Others," Sociometry, XXIII (December, 1960), 351-359.

[61]S. Rosen, G. Levinger, and R. Lippit, "Desired Change in Self and Others as a Function of Resource Ownership," Human Relations, XIII (1960), 187-192.

[62]W. E. Clarke, "The Relationship Between College Academic Performance and Expectancies" (unpublished Ph.D. dissertation, Michigan State University, 1960).

of students were changed when their teachers, as significant others, made positive comments to them and created an atmosphere which provided psychological security.[63] In another study conducted by Davidson and Lang, it was found that children's perception of teachers' feelings toward them correlated positively and significantly with the children's self-perception.[64] Studies by Miyamoto and Dornbush,[65] and Reeder, Donahue, and Biblarg[66] demonstrated a positive relationship between self-concept and perceived evaluations by significant others. Furthermore, the relationship between self-concept of academic ability in school and academic performance, as well as between self-concept of academic ability and perceived evaluations by significant others, was indicated by research carried out by Brookover, Thomas, and Patterson.[67] Their research also demonstrated the relationship

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[63]J. W. Staines, "Self-Picture as a Factor in the Classroom," British Journal of Educational Psychology, XXVIII (June, 1956), 97-111.

[64]H. H. Davidson and G. Lang, "Children's Perceptions of Their Teachers' Feeling Toward them Related to Self-Perception, School Achievement and Behavior," Journal of Experiment Education, XXIX (1960), 107-118.

[65]Frank Miyamoto and Stanford Dornbuch, "A Test of the Inter-actionist Hypothesis of Self-Conception," American Journal of Sociology, LXI (1956), 399-403.

[66]Leo G. Reeder, G. A. Donahue, and A. Biblarg, "Conception of Self and Others," American Journal of Sociology, LXVI (1960), 153.

[67]W. B. Brookover, Shailer Thomas, and Ann Patterson, "Self-Concept of Ability and School Achievement," Sociology of Education, XXXVII (1964), 271-278.

between a student's perception of evaluation by significant others of his academic ability and his academic performance. That self-appraisal reflects the appraisals of significant others was demonstrated in a study conducted by Helper. Helper studied the relationship between parental evaluations of their children and the children's self-evaluations, and reported that "On the whole, then, the data seem to point out the existence of a slight but real tendency toward similarity between parents' evaluations of their children and the children's self-evaluations."[68] The theory that the self-concept an individual holds is learned from interaction with others was also supported by Manis.[69] Similarly, Coopersmith, in a comprehensive study entitled The Antecedents of Self-Esteem, indicated that "Taken as a whole the results do indicate that favorable attitudes and treatment by persons significant to an individual, be they parents or peer, are likely to have enhancing effects upon self-judgments."[70] By this

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[68]M. M. Helper, "Parental Evaluations of Children and CHildren's Self-Evaluations," Journal of Abnormal and Social Psychology, LVI (1958), 90.

[69]M. Manis, "Personal Adjustment, Assumed Similarity to Parents and Inferred Parental Evaluations of the Self," Journal of Consulting Psychology, XXII (1958), 481-485.

[70]Stanley Coopersmith, The Antecedents of Self-Esteem (San Francisco and London: W. H. Freeman and Company, 1967), p. 79.

statement Coopersmith did not mean that individuals' self-judgments would be enhanced if the significant others made uncritical, unrestricted remarks about the person and held totally favorable attitudes toward him. Bledsoe and Garrison stated that "The pupil's self-concept is an outgrowth of his experience; it is largely achieved through contact with others. Thus the pupil's self-concept is dependent upon the quality of people with whom he has associated."[71]

Several other studies focusing on such topics as the changes in self-concept in a group setting, the effects of failure on self-concept, and the effect of counseling on self-concept and achievement in schools were discussed by Brookover and his associates.[72] Commenting on the research on self-concept, Brookover suggested that "There is substantial theoretical rationale for inducing changes in the self-concept and the performance of the individual through the modification of the expectations of significant others."[73] He further pointed out that there is a need "for collecting information on the social context within which the student learns rather than the

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[71]J. C. Bledose and K. C. Garrison, The Self-Concepts of Elementary School Children in Relation to Their Adademic Achievement, Intelligence, Interests, and Manifest Anxiety (Athens, Georgia: University of Georgia, College of Education, 1962), p. 168.

[72]Brookover, et al., Self-Concept of Ability . . . , 1965, pp. 16-28.

[73]Ibid., p. 28.

characteristics or traits of the student himself as has been the case in educational psychology.[74] He noted that concern with social context has recently been shown by researchers who have become interested in the "sociology of learning," but most of them have focused on such social background variables as father's occupational level, other socioeconomic status characteristics, the number of science courses taken during the teacher's college training, size of schools, neighborhood, and a host of other variables.[75] Brookover pointed out that most researchers have seldom given any attention "to the development of propositions about how these social background factors become translated into differential action in the classroom."[76] Likewise, many sociologists and social psychologists have advocated the idea "that the actor organizes his behavior according to his definitions of the social context. . . . But the translation of socio-psychological assumptions into theoretical propositions and educational research, however, is virtually absent."[77]

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[74]Brookover, et al., Self-Concept of Ability . . . , 1967, p. 18.

[75]See S. Boocock, "Towards a Sociology of Learning: A Selective Review of Existing Research," Sociology of Education, XXXIX (Winter, 1966), 1-45; Brookover, et al., Self-Concept of Ability . . . , 1967, p. 18.

[76]Brookover, et al., Self-Concept of Ability . . ., 1967, p. 18.

[77]Ibid., p. 19.

Brookover's Study: An Overview of Propositions and Findings

According to the basic propositions of Brookover's theory,

> A student's self-concept of academic ability results from his perceptions of the evaluations significant others hold of his ability. The student's self-concept of academic ability in turn functions to limit the level of academic achievement attempted. Self-concept of academic ability is therefore hypothesized as an intervening variable between the expectation and evaluations of significant others and school achievement. The relationship of perceived evaluations of significant others to self-concept is conceptualized as a necessary and sufficient condition, i.e., a change in the perceived evaluations of others will be reflected in a change in self-concept. The relationship of self-concept of academic ability to academic achievement, on the other hand, is hypothesized as a necessary but not a sufficient condition for the occurrence of a particular level of academic performance.[78]

Brookover and his associates systematically tested the above theory. The data they obtained revealed "that parents and other family members are more likely than any other category to be 'significant others' for adolescents during the junior and senior high school years."[79] This is contrary to other assumptions, which point out that friends are more likely to be "significant others" for the adolescent during the above period.[80] However, in later years friends

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[78] Ibid., p. 140.

[79] Ibid., p. 141.

[80] See James S. Coleman, "The Adolescent Subculture and Academic Achievement," Journal of Sociology, LXV (1960), 341-347.

as "significant others" become important and the impact or perceived evaluation of friends on self-concept of ability increases.[81] Teachers are less likely to be important as "significant others" for the major portion of the secondary school group.[82]

In regard to the relationship between self-concept of ability and I.Q. scores, socioeconomic status, and achievement in schools, Brookover wrote that

> The relationships supporting the social psychological theory of school learning presented here are not therefore greatly affected by variations in either measured intelligence or socioeconomic status. Rather, the evidence indicates that much of the correlations between these variables and school achievement is accounted for by variation in self-concept of ability.[83]

In explaining performance by students in schools, the self-concept of ability appears to be a more relevant variable than the others because it explains how the evaluations of others are translated into behaviaor which is related to achievement in schools.[84]

The systematic testing of the basic propositions of Brookover's theory has not provided any basis for rejecting

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[81] Brookover, et al., Self-Concept of Ability . . . , 1967, p. 141.

[82] Ibid., p. 142.

[83] Ibid., p. 145.

[84] Ibid., pp. 144-146.

it. "Rather, substantial support has been produced."[85] The theory advocated by Brookover was further supported by Edsel Erickson,[86] Ann Patterson,[87] Richard Morse,[88] Kenneth Harding,[89] David Haarer,[90] Ahmad Sidawi,[91] and James Votruba.[92]

Chapter IV describes the methods used in the collection and analysis of the data.

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[85] Ibid., p. 146.

[86] Edsel Erickson, "A Study of Normative Influence of Parents and Friends upon Academic Achievement" (unpublished Ph.D. dissertation, Michigan State University, 1965).

[87] Ann Patterson, "An Evaluation of an Instrument Designed to Measure the Construct, Self-Concept of Academic Ability" (unpublished Ph.D. dissertation, Michigan State University, 1966).

[88] Richard Morse, "Self-Concept of Ability, Significant Others, and School Achievement of Eighth Grade Students: A Comparative Investigation of Negro and Caucasian Students" (unpublished Master's thesis, Michigan State University, 1963).

[89] Kenneth L. Harding, "A Comparative Study of Caucasian Male High School Students who Stay in School and Those Who Drop Out" (unpublished Ph.D. dissertation, Michigan State University, 1966).

[90] David L. Haarer, "A Comparative Study of Self-Concept of Ability between Institutionalized Delinquent Boys and Non-Delinquent Boys Enrolled in Public Schools" (unpublished Ph.D. dissertation, Michigan State University, 1964).

[91] Sidawi, "Self-Concept of Ability . . ."

[92] Votruba, "A Comparative Analysis . . ."

CHAPTER IV

RESEARCH METHODOLOGY

In this chapter the population and site of this research is described. The operational definitions of the major and related variables and instruments are specified, and the procedures for data collection and data analyses are presented.

Population and Site of Research

The population under analysis included 1219 seventh grade students who were enrolled in sixteen different schools during the 1970-71 academic year in the city of St. John's, Newfoundland, Canada. Five of these schools were being administered by the Avalon Consolidated School Board, while eleven others were controlled by the Roman Catholic School Board.

Types of Analyses and Population

Two sets of analyses were done in this study. Out of the above 1219 students who participated in the study, complete data for one set of analyses were available only for 161 students. For the second set of analyses data

were available for all the 1219 students. It should be noted that 161 students on which achievement data were available formed an adequate sample to test the hypothesized relationship between student's self-concept of ability and his academic achievement and other related questions. The correlations obtained between self-concept of ability and academic achievement (see Chapter V) in this study using the sample consisting of 161 students are not significantly different from the correlations between these variables found by Brookover, Sidawi and Votruba in their studies.

1. The relationship between self-concept of academic ability and achievement in school was analyzed in the first set.

2. The second set of analyses focused on the relationship between self-concept of academic ability and perceived evaluations by others (N=1219).

Data Collection Procedures

The data were collected by means of a questionnaire. The questionnaires were distributed to the students in the classroom by teachers under the supervision of the principals in each of the fifteen schools on December 14, 1970. In one school, questionnaires were distributed on December 15.

Instruments Used

The following instruments were used to collect the data:

1. Michigan State University (M.S.U.) Self-Concept of Academic Ability Scale.

2. M.S.U. Perceived Evaluations of Students' Academic Ability by Others Scales.

3. M.S.U. Significant Others Questionnaires.

4. M.S.U. Specific Subject Self-Concept of Academic Ability Scale.

Major and Related Variables

The following are the variables analyzed in this study:

1. Academic Achievement
2. Self-Concept of Academic Ability
3. Perceived Parents' Evaluation
4. Perceived Friends' Evaluation
5. Perceived Teachers' Evaluation
6. Perceived Principals' Evaluation
7. Perceived Counselors' Evaluation
8. Perceived Ministers' Evaluation

The other related variables are listed below:

9. Specific Subject Self-Concept of Ability in Six Subjects (i.e., Mathematics, English, History-Geography, Science, Literature and French)
10. Sex

Data on variables such as educational attainment of father and mother, occupational level of parents, and

score on intelligence tests were not available. This lack of data, to some extent, does not permit the desired comparison of this study with studies conducted by Brookover, Sidawi and Votruba. Although the variations in the major hypotheses due to the above variables cannot be accounted for in this study, these variables are not central to the interaction theory of Brookover. There is some evidence that SCA is significantly associated with academic achievement when I.Q. scores and SES (socio-economic status) variables are controlled.[1]

Operationalization of Variables

In this study the major and related variables are operationalized as below.

Academic Achievement

The indices of a student's academic achievement are:

(1) the grade point average,

(2) grades in each of the six subjects (Mathematics, English, Science, History-Geography, Literature and French).

Grades obtained by students were not made available by all schools. Grades could be obtained only for 69 male and 92 female students from six schools out of the sixteen. The grades obtained by these students represented the marks received by them during the period of March through May, 1970-71.

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[1] Brookover, et al., Self-Concept of Ability . . ., 1962, pp. 37, 39; also see Votruba, "The Comparative Analysis. . .," p.35.

The grading system included an allotment of letter grades to students which corresponded with total marks obtained by them in each subject out of the maximum marks of one hundred. The letter grades corresponded to the percentages of marks as follows:

A = 85-100
B = 75-85
C = 60-74
D = 50-59
F = below 50

For the purposes of this study, students were graded on a five-point scale, i.e., a student who obtained a letter grade of "F" was given one point, two points for letter grade "D," three points for letter grade "C," four points for the letter grade "B," and five points for the letter grade "A."

The grade point average was computed by adding the points obtained by students in Mathematics, English, History and Geography, Science, and Literature and dividing the total scores by five. It should be noted here that grades obtained by students in French were excluded in computing the grade point average for two reasons: (1) the grades in French for all the students were not available, and (2) the grading system for French was not uniform in all the schools. In some schools only a pass or fail grade was given, in others, letter grades of A, B, C, were given. It was not clear how these letter grades corresponded to numerical grades.

Self-Concept of Academic Ability

In this study self-concept of academic ability "refers to the evaluating definitions which an individual holds of himself in respect to his ability to achieve in academic tasks in general as compared with others in his school class."[2] This definition of self-concept is derived from Mead's social psychology and is consistent with the Meadian concept of formulation of the self.

Operationally defined, a students' self-concept of ability is the sum of his responses on the Michigan State University Self-Concept of Adademic Ability Scale, hereafter referred to as "SCA" (see Appendix A). This scale was developed by Brookover et al. and has been tested for its reliability and validity by Ann Peterson.[3] The scale consists of eight multiple choice items and "each item is scored from 5 to 1 with the higher self-concept alternatives receiving the higher values. In keeping with our definition of general self-concept of academic ability, each item asks the student to compare himself with others in his social system on the dimension of academic competency.[4]

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[2]Brookover, et al., Self-Concept of Ability. . ., 1967, p. 59.

[3]See Ann Peterson, "Reliability and Validity of Self-Concept of Ability Scale," in Brookover, et al., 1967, pp. 155-172.

[4]Brookover, et al., Self-Concept of Ability. . ., 1967, pp. 59-60.

Students Perceptions of Evaluation of Their Academic Ability by Others

The self-other relationship and analyses of its effect on the formation of general self-concept of ability is basic to this study. In order to measure the self-other relationship the Perceived Evaluation of Students' Academic Ability by Others Scale, as developed by Brookover et al. at Michigan State University, was used.[5] Brookover et al. in their studies concerned themselves with students' perceptions of how three significant others--parents, friends, and teachers--evaluated their academic ability. They used three scales to measure the self-other relationship.

But, in this study it was intended to examine the students' perceptions of others' evaluations of their academic abilities by three more "significant others": principal, counselors and minister or priest. The addition of these three "significant others" was based upon observations about the setting of the educational system in Newfoundland. Because schools in Newfoundland are organized along denominational lines, it was reasoned that in this context a priest or minister would play an important role in the lives of students. Based upon the observation that the British educational practices had considerable influence on the outlook of school authorities in Newfoundland, it was thought that principals might

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[5] Ibid., pp. 60-61.

perceive their roles as comparable to that of head masters in the British school system, and thus might be exerting considerable influence in the formation of students' self-concepts as learners. In recent years Newfoundland's educational system has been experiencing the impact of American educational practices and the trend is towards introducing counseling services into the Newfoundland schools. This observation raised the possibility that counselors might also be playing important roles in the formation of students' self-concept of ability.

Thus, in order to measure students' perceptions of others' evaluations of their academic ability by parents, friends, teachers, principals, counselors and ministers, six scales were used.* Each scale was composed of multiple choice items and each is referred to as follows:

1. Perceived Evaluations of Students' Academic Ability by Parents Scale (PPEV).
2. Perceived Evaluations of Students' Academic Ability by Friends Scale (PFEV).
3. Perceived Evaluations of Students' Academic Ability by Teacher Scale (PTEV).
4. Perceived Evaluations of Students' Academic Ability by Principal Scale (PXEV).
5. Perceived Evaluations of Students' Academic Ability by Counsellor Scale (PCEV).
6. Perceived Evaluations of Students' Academic Ability by Minister Scale (PMEV).

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*See Appendix B.

General Significant Others (see Appendix C)

The names of individuals who were "significant others" in the lives of students were obtained in response to the following statement: "There are many people who are important in our lives. In this space below, list the names of the people who you feel are important in your life. Please indicate who each person is." This question was designed by Brookover et al. and responses of students to the above question were labeled as student's general significant others.

Academic Significant Others

The names of people who were "significant others" in the academic lives of students were obtained in response to the question prepared by Brookover et al. "There are many people who are concerned about how well young people do in school. In the space below, list the names of the people you feel are concerned about how well you do in school. Please indicate who each person is."

Specific Subject Self-Concept of Academic Ability (SSSCA)

A student's perception of how well he performs in different subjects is his SSSCA. Operationally defined it is the student's response to the Michigan State University Specific Subject Self-Concept of Ability Scale (see Appendix D). This scale was modified by adding two more subjects: French and Literature. The items on this scale are similar to the items on the M.S.U. Self-Concept of Academic

Ability Scale, the only difference being that this time it deals with specific subjects: Mathematics, English, Science, History-Geography, Literature, and French. These are the core academic courses offered in Newfoundland schools. "The student is asked to respond separately by subjects thus giving four eight-item tests which are scored like the general self-concept test."[6]

Data Analysis Procedures

Analysis procedures may be summarized as follows: (1) Data were coded and punched on I.B.M. cards by the professional key punchers at Michigan State University Computer Laboratory and analyzed by using the I.B.M. 370/155 computer at Newfoundland and Labrador Computor Services Limited, St. John's, and CDC 360 at Michigan State University; (2) Total scores were computed from the Self-Concept of Ability Scale, the Perceived Evaluations by Other Scales, and the grade point average of each of the respondents; (3) Pearson Product Moment Correlations, means, standard deviations, Kurtosis were calculated using the I.B.M. 370/155 computer; (4) Correlations were based upon raw scores. For missing data, the model response in the scale was substituted; (5) A comparison was made between the results found by the Brookover study, the German, and the Lebanon study with the present study (i.e., the Newfoundland study).

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[6]Brookover, et al., Self-Concept of Ability. . ., 1962, p. 29.

CHAPTER V

RESEARCH FINDINGS

The major hypotheses are tested, and the results of the analyses are presented in this chapter. The results of this study are also compared with the results of the Brookover, the German, and the Lebanese studies.

Relationship of Self-Concept of Academic Ability to Achievement

The relationship between self-concept of ability (SCA) and achievement in school (grade point average or GPA) was stated in the form of the following hypothesis:

Hypothesis 1: Students' self-concept of ability is associated with academic achievement.

Correlational Analysis

In order to test hypothesis 1, the Pearson Product Moment Correlation was calculated. The correlation between SCA and GPA for the male students (N=69) was .49 and .51 for the female students (N=92). Both of these correlations are significant beyond the .05 level.

The magnitude of correlations between SCA and GPA found in this study are comparable to the magnitude of the correlations between SCA and GPA found in Brookover's, Votruba's and Sidawi's studies.

Brookover, in his sample of seventh grade students, obtained a correlation of .62 for the males (N=225) and .55 for the females (N=307).[1] Votruba used a sample of eighth grade students (N=750) in Gissen, Germany and obtained a correlation of .56.[2] Sidawi used a sample of seventh grade male students (N=326) in Lebanon and obtained a correlation of .39.[3]

There are slight differences between the results obtained by Brookover and the results obtained by others. The difference may be accounted for by the fact that Brookover used a number of indices to determine achievement by students in schools, while only grade point average (GPA) was used as an index of school achievement by others. In the present study, GPA was calculated from the grades obtained by students between the period of March through May. Sidawi obtained a relatively low correlation between SCA and GPA in Lebanon. "Factors accounting for such differences between Brookover's findings and this study's may include the following: the type and number of indexes used to determine achievement, the number of items used to give the total scores, which are known elements introducing variation and error."[4] It should be noted that the

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[1]Brookover, et al., Self-Concept of Ability. . ., 1967, p. 88.

[2]Votruba, "A Comparative Analysis. . .," p. 34.

[3]Sidawi, "Self-Concept of Ability. . .," p. 140.

[4]Ibid., p. 140.

correlations between SCA and GPA reported in all these studies are significant beyond the .05 level.

Thus, the major hypothesis that self-concept of ability is associated with school achievement was substantiated, and it seems possible that self-concept is a significant factor influencing achievement for the seventh grade population of this study. In the absence of other competing variables such as father's occupations and I.Q. scores it was not possible to carry out more stringent tests for hypothesis 1. However, hypothesis 1 was further supported when data on specific self-concept of ability were analyzed.

Specific Subject Self-Concept of Ability (SSSCA) and its Relationship to Grades in Six Specific Subjects

Mathematics, English, History and Geography, Science, Literature and French

In Chapter IV, a review of literature on self-concept as global vs. specific was presented and it was pointed out that specific self-concept is restricted to a relatively narrow self-definition in a narrow social context. Brookover pointed out that:

> on logical grounds, items which assess specific academic self-conceptions ought to be superior to general self-perception items when school achievement is to be predicted.[5]

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[5]Brookover, et al., Self-Concept of Ability. . .," 1967, p. 23. Also see discussion on it in Chapter IV.

It was further suggested by him: "that self-concept of ability may be differentiated into specific-subject self-concepts for males."[6] These general theoretical propositions were stated in hypothesis form as follows:

Hypothesis 2: Student's specific subject self-concept of ability (SSSCA) is associated with his achievement in the corresponding subjects in schools.

The above hypothesis was tested by using correlational analysis. The correlations between SSSCA and grades in six different subjects are shown in Table 1. The data for SSSA were obtained by distributing the Michigan State University Specific Subject Self-Concept of Ability Scale.[7]

The correlations shown in Table 1 are of a similar order of magnitude as the correlation between self-concept of ability and grade point average (.49 to .51). All these correlations, with the exception of one, are significant beyond the .05 level, and thus give further support to the claim that students' self-concept of ability is associated with academic achievement.

According to the frame of reference of this study, the specific subject self-concept of ability is a better predictor of grades in specific subjects but "The general self-concept of ability scale is the better predictor of

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[6]Brookover, et al., Self-Concept of Ability. . .," 1962, p. 50.

[7]See p.101, Chapter IV of this study.

TABLE 1.--Correlation Between Specific Subject Self-Concept of Ability and Grades in Each of the Six Subjects for Males and Females.

Variables Correlated	Correlation Coefficient			
	Male	N	Female	N
Self-Concept of Ability in Math--Grade in Math.	.47	56	.43	89
Self-Concept of Ability in English--Grade in English	.31	64	.35	91
Self-Concept of Ability in History-Geography--Grade in History and Geography	.30	37	.61	89
Self-Concept of Ability in Science--Grade in Science	.43	62	.50	89
Self-Concept of Ability in Literature--Grade in Literature	.37	37	.34	89
Self-Concept of Ability in French--Grade in French	.66	38	.20*	87

*Correlation is not significantly different from zero.

total grade point average than any of the specific subject scales."[8] These general theoretical propositions were stated in the form of the following testable hypotheses:

Hypothesis 3: Associations between student's specific subject self-concept of ability and achievement in each of the corresponding subjects is greater than the associations between student's general self-concept of ability and achievement in each of the subjects.

[8]Brookover, et al., Self-Concept of Ability. . .," 1962, p. 47.

Hypothesis 4: Associations between student's self-concept of ability and overall achievement (grade point average) is greater than the association between student's specific subject self-concept of ability and overall achievement.

The basic reasoning behind hypotheses 3 and 4 is this:

> If the specific self-concept is functionally different from the general (SCA), the specific subject self-concept correlations with specific subject achievement should be significantly higher than the general self-concept correlations.[9]

For the purpose of comparison, the correlations between SSSCA and grades in each subject, and correlations between SCA and grades in each subject are presented in Table 2 (see hypothesis 3).

The correlations between SCA and GPA, and the correlations between SSSCA and GPA are presented in Table 3 (see hypothesis 4).

The correlations shown in Table 2 between SSSCA and grades in each of the six subjects are of essentially the same magnitude as the correlations between SCA and grades in each of the six grades. There are no significant differences between the correlations between SSSCA and grades in each of the subjects and corresponding correlations with self-concept of ability and grades in each subject.[10]

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[9] Ibid., p. 45.

[10] Correlations were statistically tested for significant differences.

TABLE 2.--Correlation Between Specific Subject Self-Concept of Ability and Grades in Each of the Six Subjects and Correlation Between General Self-Concept of Ability and Grade in Each of the Six Subjects for Males and Females.

Correlation Coefficient	Variables			
	SSSCA		GSCA	
	Male	Female	Male	Female
Math	.47	.43	.55	.40
English	.31	.35	.40	.48
History-Geography	.30	.61	.23	.43
Science	.42	.50	.51	.47
Literature	.37	.34	.40	.53
French	.66	.20	.43	.31

TABLE 3.--Correlation Between General Self-Concept of Ability and Grade Point Average and Correlation Between Specific Subject Self-Concept of Ability and Grade Point Average for Male and Female.

Variables Correlated	Correlation Coefficient			
	M	N	F	N
GSCA - GPA	.49	65	.51	91
SSCA in Math--GPA	.47	65	.55	91
SSSCA in English--GPA	.40	65	.40	91
SSSCA in History and Geography--GPA	.32	65	.64	91
SSSCA in Science--GPA	.45	65	.54	91
SSSCA in Literature--GPA	.32	65	.44	91
SSSCA in French--GPA	.48	63	.48	91

All r's statistically significant beyond .05 level.

The correlations between SSSCA and GPA, and correlations between SCA and GPA shown in Table 3 are essentially of the same magnitudes. Thus hypotheses 3 and 4 were not supported for the seventh grade sample used in this study.

Brookover, in his study, used a sample of seventh grade students (N=1050) to test if "students' self-concepts of ability in specific subject areas are functionally distinct from their general self-concepts of ability" and found that with the exception of "English the correlation between specific subject self-concept and subject achievement are higher than the correlation between general self-concept and achievement in specific subjects. Three of the six correlations were significantly higher."[11] Brookover's analyses also supported hypothesis 4. He found the self-concept of ability scale was a "better predictor of total grade point average than any of the specific subject scales,"[12] although SSSCA is a good predictor for males. Sidawi and Votruba did not test hypotheses 2, 3 and 4.

Factors accounting for the results obtained in this study may be due to cultural factors and the nature of the curriculum. It seems obvious that seventh grade students in their study did not differentiate specific subject self-concept of ability from their self-concept of ability.

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[11] Ibid., p. 45. For other results see pp. 42-50.

[12] Ibid., pp. 47-50.

Self-Concept as an Intervening Variable

One of the basic assumptions in the theoretical frame of reference of this study was that "self-concept of academic ability is dependent upon perceived evaluations of significant others and that academic achievement is related to these perceptions only indirectly through the association of those perceptions with self-concept and other factors."[13] Hypotheses 5 and 6 were formulated to test this assumption.

Hypothesis 5: The magnitude of the associations between the perceived evaluations of academic ability by others and self-concept of academic ability is greater than the associations between self-concept of ability and academic achievement.

Brookover points out that

> this hypothesis is derived in part from the postulate . . . that self-concept of ability is a necessary but not sufficient factor in school achievement. In this context we hypothesize that some students who are evaluated by others as able to achieve and who believe that they are able to do so may not choose to perform in accordance with either the perceived evaluations of others or their self-concept of ability. The correlation between SCA and GPA are therefore hypothesized to be lower than the perceived evaluation and SCA correlations."[14]

The correlations are shown in Table 4.

As indicated in Table 4, for females, the magnitude of correlations between perceived evaluations and SCA are slightly higher than the association between self-concept of ability and school achievement (grade point average).

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[13] Brookover, et al., Self-Concept of Ability. . ., 1967, p. 18.

[14] Ibid, p. 118.

TABLE 4.--Correlations Between Perceived Evaluations by Friends, Parents, Teachers, Principals, Counsellors, Ministers, and Self-Concept of Academic Ability, and Between Self-Concept of Academic Ability and Academic Achievement, by Sex.

Perceived Evaluation by	Correlation with SCA	
	Male (N=69)	Female (N=92)
Friends (PFEV)	.53	.69
Parents (PPEV)	.57	.62
Teachers (PTEV)	.62	.70
Principals (PXEV)	.53	.61
Counsellors (PCEV)	.51	.72
Ministers or Priests (PMEV)	.37	.64
Grade Point Average (GPA)	.49	.51

All r's statistically significant beyond .05 level.

In the case of males the magnitude of associations between perceived evaluations of friends, parents, teachers, principals, ministers and SCA are relatively higher (except the correlation between PMEV and SCA) than that of the correlation between SCA and GPA (.49). Correlations between perceived evaluations and SCA, however, are not significantly different than that of the correlation between SCA and GPA.

Hypothesis 6: The magnitude of the correlation between self-concept of academic ability and academic achievement is greater than the correlation between perceived evaluations of academic ability and academic achievement.

Hypothesis 6 is derived from the assumption that:

> any variable intervening between independent and dependent variables should be more highly correlated with the dependent variable than the independent variable is with the dependent one.[15]

The support of hypothesis 6 is suggested by the results of the correlational analysis presented in Table 5; although there is no significant difference between the correlation of perceived evaluations and GPA, and the correlation between SCA and GPA.

TABLE 5.--Correlation Between Self-Concept of Ability (SCA) and Achievement (GPA), and Correlation Between Perceived Evaluations and GPA, by Sex.

Variables Correlated	Coefficient of Correlation			
	Male	N	Female	N
SCA - GPA	.49	69	.51	91
PFEV - GPA	.20	65	.40	90
PPEV - GPA	.24	65	.38	91
PTEV - GPA	.25	65	.42	89
PXEV - GPA	.31	65	.39	90
PCEV - GPA	.25	59	.31	87
PMEV - GPA	.27	57	.32	87

In order to test the above hypothesis in a more refined way, a first order partial correlation analysis was run in which variations in the perceived evaluations of

[15] Ibid., p. 119.

others were partialled out of the correlations between SCA and GPA. Similarly, SCA was partialled out of the correlations between perceived evaluations of others and GPA. Then, the results of the first order correlations were compared to the zero order correlations.

> It was hypothesized that the resulting first order correlations (SCA x GPA) would differ in the same direction as the zero order correlations. It was further hypothesized that the correlations between the intervening variable, SCA, and the dependent variable, GPA, would be reduced less by controlling the independent variable, perceived evaluations, than would the correlations between the independent and dependent variables by controlling for the intervening variable.[16]

The results of the first order partial correlations for males are shown in Table 6 and for females in Table 7.

TABLE 6.--The First Order Partial Correlations Between Grade Point Average (GPA) and Self-Concept of Ability (SCA) Compared with Correlations Between GPA and Perceived Evaluation of Friends (PFEV), Parents (PPEV), Teachers (PTEV), Principals (PXEV), Counselors (PCEV) and Ministers (PMEV) for Males.

Variables:	1. SCA 2. GPA 3. PFEV 4. PPEV 5. PTEV 6. PXEV 7. PCEV 8. PMEV

First Order Partial Correlation with SCA or Perceived Evaluation Controlled.

$r_{12.3}=.48$	$r_{12.4}=.44$	$r_{12.5}=.39$	$r_{12.6}=.43$	$r_{12.7}=.43$	$r_{12.8}=.43$
$r_{23.1}=-.07$	$r_{24.1}=-.05$	$r_{25.1}=.02$	$r_{26.1}=.00$	$r_{27.1}=.00$	$r_{28.1}=.18$

[16] Ibid., p. 120-121.

TABLE 7.--The First Order Partial Correlations Between Grade Point Average (GPA) and General Self-Concept of Ability (SCA) Compared with Correlations Between GPA and Perceived Evaluations of Friends (PFEV), Parents (PPEV), Teachers (PTEV), Principals (PXEV), Counselors (PCEV) and Ministers (PMEV) for Females.

Variables:	1. SCA 2. GPA 3. PFEV 4. PPEV 5. PTEV 6. PXEV 7. PCEV 8. PMEV

First Order Partial Correlation with SCA or Perceived Evaluation Controlled					
$r_{12.3}=.35$	$r_{12.4}=.37$	$r_{12.5}=.36$	$r_{12.6}=.34$	$r_{12.7}=.42$	$r_{12.8}=.41$
$r_{23.1}=.08$	$r_{24.1}=.10$	$r_{25.1}=.05$	$r_{26.1}=.17$	$r_{27.1}=.10$	$r_{28.1}=.00$

The first order partial correlations (for males) shown in Table 6 between perceived evaluation and GPA when controlling for SCA were smaller (almost reduced to zero) than the correlations between SCA and GPA when controlling for perceived evaluations. It should be further noted that the first order partial correlations between SCA and GPA range from .39 to .48. On the average, these correlations are only .03 less than the comparable zero order correlation of .49. On the other hand, the comparable zero order correlations between perceived evaluations and GPA ranged from .20 to .31 (see Table 5).

The results of the first order correlations for the females are similar to the results found for the boys (see Table 7). However, there are some sex differences. The first order partial correlations between SCA and GPA when controlling for perceived evaluations are effected more than similar correlations for the males (see Table 6). The first order partial correlations for females when controlling for perceived evaluations ranged from .34 to .42. On the average, these correlations are .15 less than the zero order correlation of .51 between SCA and GPA (see Table 5).

On the whole, the correlations between GPA and SCA are larger when perceived evaluations are controlled than those between GPA and perceived evaluations when SCA is controlled in this study.

The above analysis, therefore, seems to provide confirmation to the hypothesis that self-concept of ability is an intervening variable.

Comparison with Other Studies

The results of the simple correlational analysis and the first order correlation analysis which were carried out to test hypotheses 5 and 6 are complementary to the results obtained by Brookover, Votruba and Sidawi.

Hypothesis 5 was tested by Sidawi, Brookover and Votruba. Sidawi used a sample of seventh and ninth grade students in Lebanon and found "correlations between the

first pair (perceived evaluations by others and SCA) ranged from .66 to .83, and between the second pair (SCA and GPA) from .37 to .38 for the whole self-concept scale."[17] Brookover, in his longitudinal study, found the correlations between the first pair ranged from .50 to .77; and between the second pair from .49 to .55.[18] Votruba used an eighth grade sample and found correlations between the first pair ranged from .78 to .81, and found a correlation of .56 between SCA and GPA.[19] In the present study the correlations between the first pair ranged from .37 to .72 and between the second pair, from .49 to .51 (see Table 4).

Hypothesis 6 was tested by Votruba and Brookover. Votruba found a correlation of .56 between GPA and SCA. Correlations between perceived evaluations and GPA in his study ranged from .50 to .52.[20] Brookover, in his longitudinal study, found the correlations between the first pair ranged from .49 to .57; and between the second pair from .32 to .52.[21] In the present study the correlations between the first pair (GPA and SCA) ranged from

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[17]See Sidawi, "Self-Concept of Ability . . .," p. 165.

[18]See Brookover, et al., Self-Concept of Ability. . ., 1967, p. 119.

[19]See Votruba, A Comparative Analysis. . . , p. 41.

[20]See Brookover, et al., Self-Concept of Ability . . . , 1967, p. 120.

.49 to .51, and between the second pair (perceived evaluations and GPA) from .20 to .42 (see Table 5).

Like the present study (see Tables 6 and 7), Brookover[22] and Votruba went on to further test hypothesis 6 by "using a comparison in which variations in the perceived evaluations of others was partialled out of the correlation between SCA and GPA, and self-concept of ability was partialled out of the correlations between perceived evaluations of others and GPA."[23] The results of their analyses were complementary to the results of this study.

The cross-cultural findings reported above provided further support to the claim that SCA is an intervening variable.[24]

Second Set of Analyses

Basic to the theoretical frame of reference of this study "is the relation between the evaluations of others and self-concept of ability."[25] A related question is:

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[22] Ibid., p. 122.

[23] Votruba, "A Comparative Analysis . . .," p. 42.

[24] For the theoretical statement on this, see Chapter II of this study.

[25] Brookover, et al., Self-Concept of Ability . . ., 1967, p. 104. Also see discussion on student role-relationship in Chapter II of the present study.

Who are the others with whom the actor associates in a significant manner? "Much of the sociological and educational literature involving adolescents assumes that peers become the primary reference group at this age level."[26] In order to find out whether or not this is the case, in this section the question regarding "significant others" has been discussed first, and then the hypothesized relationship between perceived evaluations by others and self-concept of ability is tested.

Significant Others

The following two questions were used to identify the "significant others" of seventh grade students in St. John's. Responses to these questions were labeled "Academic significant others" (ASO) and "General significant others" (GSO).[27] These questions are:

1. There are many people who are concerned about how well young people do in school. In the space below, list the names of the people you feel are concerned about how well you do in school. Please indicate who each person is (ASO).

2. There are many people who are important in our lives. In the space below, list the names of the people who you feel are important in your life. Please indicate who each person is (GSO).

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[26] Ibid., p. 69. See also James Coleman, The Adolescent Society (Glencoe, Ill.: The Free Press, 1961).

[27] See Chapter IV in this study.

The distribution of the responses of the seventh grade students in the Avalon Schools and in the Roman Catholic Schools, and the responses of male and female students were tabulated separately for comparison purposes.

Such a comparison is not directly related to the analyses being carried out in the present study. However, as mentioned earlier, the organization of school systems in Newfoundland on denominational lines provided an opportunity to explore religious affiliated responses of students to the above questions. Ruth Wylie has reviewed some studies on "religious affiliation and self-concepts."[28] For example, Kuhn and McPartland reported an association between the kind of religious group affiliation and the number of "consensual references" made in response to the question, "Who am I?"[29]

Responses of students are organized in two different sets of "significant others" categories. The first set of categories of "significant others" are formed in such a way that they correspond to the names used in six perceived evaluations by others scales.[30] The second set of significant categories are similar to the categories used by

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[28]Wylie, The Self Concept . . . , pp. 142-143.

[29]Ibid.; also see M. H. Kuhn and T. S. McPartland, "An Empirical Investigation of Self-Attitudes," American Sociological Review, XIX (1954), 68-76.

[30]For the description of these scales, see Chapter IV of this study.

Brookover and Sidawi. This is done so that the responses of students could be compared cross-culturally.

In Table 8 responses of students to the "academic significant others" question are listed and in Table 9 responses to the "general significant others" question are listed.

TABLE 8.--Percentage of the Male and Female Seventh Grade Students in the R.C. Schools and in the Avalon Schools Who Named at Least one Person from Each of the Following Categories of Significant Others as being Concerned about how Well They do in School.

Categories of Significant Others	The R.C. Schools		The Avalon Schools	
	Female (N=391)	Male (N=133)	Female (N=250)	Male (N=294)
Mother	94	92	91	89
Father	90	85	86	86
Teachers	83	65	54	46
Principals	61	47	36	18
Friend	24	17	19	13
Counsellors	10	5	9	4
Priest or Minister	5	7	1	1

Academic Significant Others: The R.C. Schools and the Avalon Schools

It is clear from the results shown in Table 8 that Mother (89% to 94%) and father (86% to 90%) were more often named than any other persons by all the students as being concerned about how well they do in schools. Mother (94%), Father (90%), teachers (83%), principals (61%), friends

TABLE 9.--Percentage of the Male and Female Seventh Grade Students in the R.C. Schools and in the Avalon Schools Who Named at Least One Person from Each of the Following Categories of Significant Others as Being Important in Their Lives (GSO).

Categories of Significant Others	The R.C. Schools		The Avalon Schools	
	Female (N=391)	Male (N=133)	Female (N=250)	Male (N=294)
Mother	95	86	88	83
Father	91	81	84	80
Teacher	58	35	26	24
Principal	32	17	10	5
Friend	38	26	34	22
Counsellor	10	5	5	2
Priest or Minister	9	11	2	2

(24%) and counselors (10%) were more often named by girls in Roman Catholic Schools than other students as being concerned about how well they do in school. On the other hand, priests or ministers were less often mentioned by most students than any other person as being concerned about how well they do in schools, although boys in the R.C. schools mention this category more often than the other three groups. Parents, teachers and principals were more often named by most students than friends (13% to 24%) as being concerned about how well they do in schools.

The different pattern of response among girls in the R.C. schools in regard to teachers and principals as academic significant others may perhaps be explained by

the fact that Roman Catholic teachers and principals are generally also religious leaders in Newfoundland communities. This may have influenced the R.C. boys' responses as well. There is some evidence that girls in general are more likely to accept "others" than boys.[31]

General Significant Others: The R.C. Schools and the Avalon Schools

The results shown in Table 9 indicate that mother (83% to 95%) and father (80% to 91%) were more often named than any other persons by most students as important in their lives. Mother (95%), Father (91%), teachers (58%), principals (32%), and friends (38%) and counselors (10%), were more often named by girls in the Roman Catholic schools than other students as important in their lives. Friends (22% to 38%) were more often named than principals as important in their lives by most students. Priest seemed to be more significant generally for the girls (9%) and the boys (11%) in R.C. schools than the girls (2%) and boys (2%) in the Avalon Schools.

Significant Others: The R.C. Schools and the Avalon Schools

The data presented in Tables 8 and 9 clearly indicate that parents, teachers, principals and friends

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[31] See discussion on "Sex Differences and the Self Concept," in R. C. Wylie, The Self-Concept . . . , pp. 143-149.

are both the academic and general significant others for most of the seventh grade students. The responses of the girls in R.C. schools to "significant questions" are different than the responses of other students. Data also indicate that there are many "significant others" in the lives of students in seventh grade. The effect of these "significant others" on students' self-concept of ability is analyzed later in this chapter.

A comparison of findings of this study with the findings of Brookover and Sidawi are presented in Table 10 (academic significant others).[32]

Significant Others: A Comparison of Brookover's, Sidawi's, and the Present Study

Academic Significant Others

It is clear from Table 10 that mother (82%) and father (87%) in the present study and parents (96%) in the Brookover study were named more often than any other person as concerned with how well they do in school. On the average parents (85%) were more often named than any other persons as significant academically. This was not so for the seventh grade students in Lebanon. Sidawi's data is confusing. At one place he mentioned that "teachers were more often named (53%) than any other persons as concerned

[32]Votruba did not carry on this kind of analysis with his German sample.

TABLE 10.--Percentage of Total Seventh Grade Students in St. John's Who Named at Least One Person from Each of the Following Categories of Significant Others as Being Concerned About How Well They Do in Schools, Compared with Brookover's and Sidawi's Studies. (Male and Female Combined, N=1068).

	Present Study	Brookover's Study (Male and Female Combined N=248)	Sidawi's Study (Male, N=574)
Parents		96	55
Mother	82		
Father	87		
School Personnel		84	60
Principals	37		
Counselors	8		
Priest	3		
Adult Relatives		38	34
Grandmother	34		
Grandfather	25		
Uncle	21		
Aunt	26		
Age-Level Relatives		25	39
Cousin	6		
Brother	19		
Sister	23		
Teacher	64	--	--
Peer or Friends	19	20	20
Unclassifiable (e.g., God, me, dog)	25	1	--

with 'how well they do in school.'"[33] But in another place, data indicate that school personnel (60%) were named more often than others.[34] Probably, teachers are classified with school personnel. In the Brookover study,[35] teachers are included under the school personnel category. A comparison among these studies indicates that teachers were more significant academically for seventh grade students in Brookover's study (84%) than for their counterparts in the Lebanese study (60%) and for the students (64%) in the present study. In St. John's on the average, 24% of the students also mentioned non-teaching personnel in the schools as academic significant others. In all three studies only this category (teachers and school personnel) approaches the nearly universal naming of parents as academic significant others.

Adult relatives were more often named by students in the Brookover study (38%) than the Lebanese study (34%). In the present study, on the average, 27 per cent of the students named adult relatives as being concerned with how well they do in school. However, grandmother was more often named (34%) than other adult relatives.

Age level relatives seem to be more significant academically for Lebanese students (39%) than for students

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[33] Sidawi, "Self-Concept of Ability . . . ," p. 158.

[34] Ibid., p. 160.

[35] Brookover, et al., Self-Concept of Ability . . . , 1962, p. 58.

in the Brookover study (25%). On the average, the age level relatives were named to be significant academically by 16 per cent of the students in the present study. Sisters were more often named (23%) than brothers (19%) and cousins (6%).

Peers or friends were named by 20 per cent of the students in Sidawi's study as well as in Brookover's study. In the present study 19 per cent of the students named peers as significantly academically.

Students in the present study more often (25%) named "God," "me," "my dog," and other unclassified entities as academic significant others.

General Significant Others

It was found in all the three studies that parents were more often named than any other persons as important in their lives (see Table 11). In Brookover's study parents were more often named (100%) than their counterparts in Lebanon (89%). In the present study, father's were named by 85 per cent and mothers by 80 per cent. These figures are not strictly comparable to those of the other studies, but it is quite possible that they indicate that almost all students named either mother or father.

School personnel and teachers were more often (62%) named by students in Brookover's study than their counterparts in Lebanon (38%). In the present study, on the

TABLE 11.--Percentage of Total Seventh Grade Students in St. John's Who Named at Least One Person from Each of the Following Categories of Significant Others as Being Important in Their Lives, Compared with Brookover's and Sidawi's Studies Male and Female Combined, (N=1068).

	Present Study	Brookover's Study (Male and Female Combined, N=248)	Sidawi's Study (Male, N=574)
Parents		100	89
Mother	80		
Father	85		
School Personnel		62	38
Principal	17		
Counselors	6		
Priest	6		
Adult Relatives		50	63
Grandmother	33		
Grandfather	24		
Uncle	19		
Aunt	22		
Age Level Relatives		63	71
Brother	42		
Sister	41		
Cousin	9		
Teachers	38	--	--
Peers or Friends	31	47	38
Unclassified	23	9	--

average, school personnel including teachers were named by 33 per cent of the students as being important in their lives. But this average of choices in each of the school personnel categories is not comparable, as can be seen by

the fact that 38 per cent of the students in this study named teachers as being important.

Adult relatives were more often (63%) named by students in Sidawi's study than their counterparts in Brookover's study and in the present study. In the present study, on the average, adult relatives were named by 25 per cent of the students as being important. Again, grandmother was more often named (33%) than any other adult relative as being important.

Age level relatives were more often named (71%) by Lebanese students than their counterparts in Brookover's study (63%). In the present study, brothers and sisters were each named by more than 40% of the students.

Friends or peers were more often (47%) named by students in Brookover's study than their counterparts in Sidawi's study (38%) and in the present study (31%). Students in the present study more often (23%) named "God," "me," "dog," and other unclassified entities than students in the Brookover study (9%).

Summary of Significant Others in the Three Studies

The comparison of the three studies indicates the following:

1. Parents were more often named than any other persons by the seventh grade students in all the studies

as important in their lives (General Significant Others).

2. Parents were more often named as significant, both academically and generally, by the seventh grade students in the present study and in the Brookover study.

3. In the Lebanese studies, teachers or school personnel were more often named than any other persons as significant academically.

4. Age level relatives were more often named as significant, both academically and generally, by the Lebanese students and by the students in the Brookover study than by the students in the present study.

5. Adult relatives were more often named as being important by Lebanese students than students studied in the U.S. and Newfoundland.

6. Friends were more often named as significant generally by the Lebanese students and the students in the Brookover study than the students in the present study.

7. Teachers were more often named in all the studies as academic significant others than as general significant others.

Relationship of Perceived Evaluations to Self-Concept of Ability

Data on perceived evaluations by six others (parents, friends, teachers, principals, counsellors and priest or minister) were analyzed for a combined sample of

1219 male and female seventh grade students. Perceived evaluations by others scores were computed from six sub-scales of PPEV (Perceived Parents' Evaluations), PFEV (Perceived Friends' Evaluations), PTEV (Perceived Teachers' Evaluations), PXEV (Perceived Principals' Evaluations), PCEV (Perceived Counsellors' Evaluations) and PMEV (Perceived Ministers or priest evaluations).[36]

Hypothesis 7: Student's perception of evaluations of their academic ability by others (parents, friends, teachers, principals, counsellors, ministers or priests) are associated with self-concept of academic ability.

In order to test the hypothesized relationship between perceived evaluations by others and SCA correlational analysis were run. Correlations between perceived evaluations and SCA, male and female combined, in sixteen schools are shown in Table 12.

The correlations shown in Table 12 are significant beyond the .05 level, however, the magnitude of association between SCA and PCEV is small. This indicates that students' perceptions of the evaluations of their academic ability by six significant others are associated with self-concepts of academic ability of seventh grade students in St. John's.

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[36]See Chapter IV of this study for further discussion on these sub-scales.

TABLE 12.--Correlation Between Self-Concept of Ability (SCA) and Perceived Evaluations by Parents (PPEV), by Friends (PFEV), by Teachers (PTEV), by Principals (PXEV), by Counselors (PCEV) and by Ministers (PMEV), Male and Female Combined (N=1219).

Variables Correlated	Correlation Coefficient
SCA - PPEV	.46
SCA - PFEV	.46
SCA - PTEV	.44
SCA - PXEV	.38
SCA - PCEV	.22
SCA - PMEV	.32

Brookover, in his sample of seventh grade students, found a correlation of .50 between perceived evaluation by mother and SCA, of .52 between perceived evaluations by father and SCA, and of .55 between PTEV and SCA.[37] In his longitudinal study involving grades eight through twelve, the magnitude of the correlations between PPEV and SCA ranged from .58 to .71, .50 to .77 between PFEV and SCA, and .59 to .63 between PTEV and SCA.[38] Sidawi in his sample of seventh grade students in Lebanon, found a correlation of .77 between PPEV and SCA, of .70 between PFEV and SCA and of .73 between PTEV and SCA.[39] Votruba in his sample of

[37] Brookover, et al., Self-Concept of Ability . . ., 1962, p. 52.

[38] Brookover, et al., Self-Concept of Ability . . ., 1967, pp. 104-105.

[39] Sidawi,"Self-Concept of Ability". . . , p. 147.

eighth grade German students found a correlation of .81 between PPEV and SCA and of .79 between the PTEV and SCA.[40] The results of these studies conducted at different places are supportive of each other and seem to substantiate the claim that students' perception of the evaluations of others are associated with their self-concept of academic ability at the seventh grade level.

Interrelation of Others' Evaluations

Within the frame of reference of this study perceived evaluations of six others (PFEV, PPEV, PTEV, PXEV, PCEV and PMEV) were independent variables. These perceived evaluation scales do not measure the same things.

In order to find out to what extent perceived parents' and perceived teachers' evaluations are independently associated with self-concept of academic ability, the relationship between PPEV and SCA, and PTEV and SCA are examined by controlling the effect of other variables. This was done by using first order partial correlational analysis. The interrelation among perceived evaluations are shown in Table 13. First order partial correlations are shown in Tables 14 and 15.

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[40]Votruba,"A Comparative Analysis". . . , p. 40.

TABLE 13.--Intercorrelation Between Perceived Evaluation of Parents' (PPEV), Friends' (PFEV), Teachers' (PTEV), Principals' (PXEV), Counselors' (PCEV), and Ministers' (PMEV) of Seventh Grade Students Male and Female Combined, (N=1219).

Variables Correlated	Correlation Coefficient
PPEV X PFEV	.75
PPEV X PTEV	.79
PTEV X PFEV	.68
PTEV X PXEV	.74
PTEV X PCEV	.48
PTEV X PMEV	.63
PPEV X PXEV	.69
PPEV X PCEV	.47
PPEV X PMEV	.60

The intercorrelations shown in Table 13 illustrate a high association between the perceived evaluations of academic ability of counselors, ministers, principals, teachers, parents and friends, with correlations ranging from .47 to .79.

Brookover in his longitudinal study involving grades eight through twelve found high associations between perceived evaluations of parents, friends and teachers, with correlations ranging as follows:[41]

[41]Brookover et al., Self-Concept of Ability . . ., 1967, p. 106.

PPEV X PFEV	.54 to .68
PPEV X PTEV	.55 to .63
PTEV X PFEV	.51 to .64

Sidawi, in his sample of seventh grade students in Lebanon, found the intercorrelations among friends, parents and teachers as follows:[42]

PPEV X PFEV	.68
PPEV X PTEV	.66
PFEV X PTEV	.74

Votruba did not analyze his data for the kind of analysis being presented in this section.

The intercorrelations obtained by Brookover and Sidawi are of the same magnitudes as the intercorrelations found in this study.

TABLE 14.--Correlation Between Perceived Parental Evaluation and Self-Concept of Ability with Perceived Friends', Teachers', Principals', Counselors', and Ministers' Evaluations Partialled Out, and Zero Order Correlation Between Perceived Parental Evaluations and Self-Concept of Academic Ability for Seventh Grade Students Male and Female Combined,(N=1219).

1 = PPEV 2 = SCA 3 = PFEV 4 = PTEV	5 = PXEV 6 = PCEV 7 = PMEV	Zero Order Correlation Between PFEV and PPEV
$r_{12.3}$ = .20		.46
$r_{12.4}$ = .44		
$r_{12.5}$ = .44		
$r_{12.6}$ = .42		
$r_{12.7}$ = .36		

[42]Sidawi,"Self-Concept of Academic Ability". . . , p. 152.

TABLE 15.--Correlations Between Perceived Teachers' Evaluation and Self-Concept of Ability With Perceived Friends', Parents', Principals', Counselors', and Ministers' Evaluations Partialled Out, and Zero Order Correlation Between Perceived Teachers' Evaluation and Self-Concept of Academic Ability for Seventh Grade Students Male and Female Combined, (N = 1219).

1 = PTEV 2 = SCA 3 = PPEV 4 = PFEV	5 = PXEV 6 = PCEV 7 = PMEV	Zero Order Correlation Between PTEV and SCA
$r_{12.3} = .14$		.44
$r_{12.4} = .14$		
$r_{12.5} = .27$		
$r_{12.6} = .39$		
$r_{12.7} = .33$		

As noted in Table 14, the first order partial correlation between PPEV and SCA was reduced to .20 from the zero order correlation between PPEV and SCA (.46) when perceived friends' evaluations were partialled out. On the other hand when perceived evaluations by teachers' (PTEV), principals (PXEV), counselors and ministers (PMEV) were partialled out, the first order partial correlation between PPEV and SCA was effected less. This indicates that perceived parental evaluation is independently associated with students' self-concept of academic ability, although perceived friends' evaluation seems to have considerable effect.

Partial correlations between perceived teachers' evaluations (PTEV) and self-concept of academic ability (SCA) are shown and compared with zero order correlations between PTEV and SCA in Table 15.

It is clear from Table 15 that partial correlations between PTEV and SCA are reduced to .14 from the zero order correlation between PTEV and SCA (.44), when perceived evaluations by parents is controlled. This is also the case when perceived friends' evaluations are controlled. This indicates that the association between PTEV and SCA is greatly influenced by the presence of PPEV and PFEV. On the other hand, when PXEV, PCEV and PMEV are controlled respectively, the first order partial correlation between PTEV and SCA is reduced less from the zero order correlation between the same two variables, although PXEV seems to have considerable effect. The differential effects of partialling out indicate that perceived evaluation scales are not measuring the same thing. Perceived parental and friends' evaluations seem to be influencing the SCA of seventh grade students in this study more than the perceived evaluations of teachers, principals, counselors and ministers.

Brookover in his longitudinal study (grades eight through twelve) "examined the affect of controlling the perceived evaluation of teachers and friends on the correlation between perceived parental evaluation and

self-concept of ability."[43] He found the first order partial correlation in each case remained .45 or above except in grade 12. The zero order correlation ranged from .58 to .71. When parents' evaluation is controlled, "the effect of variations in perceived friends and teachers evaluation on SCA are substantially reduced . . . "[44] The first order correlations in this case ranged from .19 to .61, while the zero order correlation in each case ranged from .50 to .77. Brookover's data indicated a greater influence of perceived parents' evaluations on SCA in the earlier years, but that friends gained in the later high school years is also apparent.[45]

It seems obvious from these findings that both the parents and friends influence the student's self-concept of ability (Table 12). The difference between Brookover's findings and the findings of this study may be due to the fact that in certain situations students may think that their friends have a more accurate appraisal of their academic abilities than their parents. This may be more the case where parents' educational level on the average is not high. Children seem to have some idea about the educational level of their parents, and if the students think their parents do not have a good education in comparison to

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[43] Brookover, et al., Self-Concept of Ability . . . , 1967, p. 107.

[44] Ibid., p. 108.

[45] Ibid.

others (teachers, principals), they may not consider their parents' judgment as accurate as that of their friends, who spend much of the time in school with them listening to the remarks of others (teachers, principals, counselors) about their academic ability. In Newfoundland the educational level of a large number of the population is low, relative to the population of North America.

Summary of Results

The major results of this study may be summarized as follows:

1. Self-concept of academic ability is significantly related to school achievement of seventh grade male and female students in six schools in St. John's. The correlation between self-concept of ability and grade point average was .49 for the boys (N=69) and .51 for the girls (N=92).

2. Specific subject self concept of ability in six subjects (Mathematics, English, History-Geography, Science, Literature and French), except in the case of French for girls, is related to seventh-grade achievement in the corresponding subjects. For the boys the correlations between SSSCA and grades in each of the corresponding subjects ranged from .30 to .66 and for the girls from .20 to .61 (see Table 1).

3. Specific subject self-concept of ability in six subjects is related to seventh grade achievement in the corresponding subjects approximately to the same degree that self-concept of ability is related to achievement in six subjects. Correlations between SSSCA and grades in corresponding subjects ranged from .30 to .66 for the boys, and for the girls from .20 to .61. Correlations between SCA and grades in corresponding subjects ranged from .23 to .55 for the boys and for the girls from .31 to .53 (see Table 2).

4. Self-concept of ability is related to overall grade point average for seventh grade male and female students in six schools approximately to the same degree as specific subject self concept of ability. Correlations between SCA and GPA was .49 for the boys and .51 for the girls. Correlations between SSSCA and GPA for boys ranged from .32 to .48, and for the girls from .40 to .64 (see Table 3).

5. Perceived evaluations by significant others: parents, friends, teachers, principals, counselors and ministers or priests were significantly related to self-concept of academic ability of seventh grade male and female students in sixteen schools in St. John's. The correlations ranged from .22 to .46 for the combined population (N=1219) (see Table 12).

6. Intercorrelations among Perceived Parents Evaluations, Perceived Friends Evaluations, and Perceived Teachers Evaluations for the combined sample ranged from .68 to .79 (see Table 13).

7. Associations between perceived evaluations and self-concept of ability is slightly higher than the association between SCA and overall achievement in school (GPA) for females. In the case of males the magnitude of the association between perceived evaluation of friends, parents, teachers and counselors is slightly higher than the association between SCA and GPA. The association between perceived evaluation of priest and SCA is lower in magnitude than the correlation between SCA and GPA.

For the females, the correlations between the first pair of these variables ranged from .62 to .72. The correlation between the second pair of variables was .51. For males, the correlation between the first pair of variables ranged from .37 to .62. The correlation for the second pair of variables was .49 (see Table 4). These correlations, however, were not significantly different from each other.

8. Association between perceived evaluation by others and academic achievement (GPA) was lower in magnitude than the association between SCA and GPA, although there was no significant difference.

The correlation between the first pair of variables ranged from .20 to .42 and between the second pair from .49 to .51 (see Table 5).

9. For males and females the first order partial correlations between self-concept of academic ability and academic achievement was less reduced from the zero order correlation when perceived evaluations by others were controlled (see Tables 6 and 7).

10. For males and females the first order partial correlations between perceived evaluations by others and academic achievement were greatly reduced from the zero order correlations when self-concept of ability was controlled (see Tables 6 and 7).

11. Parents were more often named than any other persons by seventh grade students in St. Johns as being concerned about how well they do in school. Mothers seemed to be significant academically for 94 per cent of the girls and 92 per cent of the boys in the R.C. Schools and for 91 per cent of the girls and 89 per cent of the boys in the Avalon Schools (see Table 8). Fathers were named by 90 per cent of the girls and 85 per cent of the boys in the R.C. Schools, and by 86 per cent of the girls and 86 per cent of the boys in the Avalon Schools, as being concerned with how well they do in school.

12. Teachers (83%), principals (61%), and friends (24%) were named more often by the girls in the R.C. Schools than other students as being concerned about how well they do in school (see Table 8).

13. Mother (89% to 94%), father (85% to 90%), teachers (46% to 83%) and principals (18% to 61%) were more often named by most students than friends (13% to 24%) as being concerned about how well they do in school (see Table 8). On the average, parents were named by 85 per cent of the students as significant academically.

14. Parents were more often named than any other persons as important in their lives (see Table 11). Mother was named most often in this respect.

15. Mothers (95%), fathers (91%), teachers (58%), principals (32%), counselors (10%), and friends (38%) were more often named by girls in the R. C. Schools than other students as important in their lives (see Table 9).

16. Friends were more often (22% to 38%) named than principals (5% to 32%) as being important in their lives (see Table 9).

17. Perceived friends' evaluations and perceived parents' evaluations (both independent variables) contribute most to the variation in self-concept of ability (dependent variable) of seventh grade students (see Tables 14 and 15).

CHAPTER VI

CONCLUSION

This study was designed to test cross-culturally several hypotheses and explore questions developed by W. B. Brookover and his associates at Michigan State University, related to the social-psychological theory of learning and achievement in school.

In carrying on the tradition of symbolic interactionism developed by Charles Cooley, George Herbert Mead and John Dewey, Brookover postulated that the student's self-concept of academic ability results from his perceptions of the expectations and evaluations of significant others. Self-concept of academic ability is symbolic behavior in as much as it involves the evaluative definitions which a student uses in comparing his own academic abilities with the academic abilities of other individuals in his class. The extent to which a student would attempt to achieve in school would be functionally limited by a student's self-concept of academic ability. In this sense, self-concept of academic ability is an intervening variable. The expectations and evaluations of others do not directly shape the behavior of a student in school. But the student's

own definitions based upon his perceptions of what others think about him as a student, is crucial to his behavior in school. The relationship of perceived evaluations and academic achievement is conceptualized as a necessary and sufficient condition, but a positive self-concept is seen as a necessary but not a sufficient condition for academic achievement.

It was hypothesized that a student's self-concept of ability would be associated with his achievement in school. This was supported by this research. The partial correlations between self-concept of ability and academic achievement when perceived evaluations were controlled, the relatively higher correlations between self-concept of academic ability and academic achievement than between perceived evaluations and academic achievement, and the relatively higher correlations between perceived evaluations by others and self-concept of academic ability than between self-concept of academic ability and academic achievement gave support to the thesis that self-concept as a variable intervenes between perceived evaluations of others and academic achievement.

The high correlations between perceived evaluations of significant others and self-concept of academic ability supported the theoretical propositions that perceived evaluations by others are a necessary and sufficient condition for the formation of self-concept of academic ability. In order for a student to develop a particular self-concept of ability he must internalize the expectations

and evaluations of those others whom he thinks are important in his life and are concerned about how well he does in school.

The results of this study based upon data from St. John's, Newfoundland, provide further support to Brookover's social-psychological theory of learning.

The practical implications of self-concept theory lie in developing a positive self-concept among those who have been labeled slow learners or uneducable. There is enough evidence that academic achievement can be enhanced by self-concept enhancement.[1]

The extent to which self-concept of ability is enhanced will depend upon the effort of society and schools. At the societal level, various movements such as the black power movement create a socio-cultural condition for the development of self-concept. On the other hand, at the community and school levels, self-concept of ability can be enhanced by discovering adequate forms of connections between significant others and schools. There is enough evidence that self-concept of ability can be modified by significant others.[2] Parents, teachers,[3] relatives,

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[1]Kvaraceus et al., Negro Self-Concept . . . , p. 1-51; Brookover, et al., Self-Concept of Ability . . . , 1965, p. 209.

[2]Ibid, p. 212.

[3]B. C. VanKoughnett and M. E. Smith, "Enhancing the Self-Concept in School," Educational Leadership, 27:3 (Dec. 1969), 253-255.

counselors[4] as significant others may play an important role[5] in the enhancement of students' self-concepts of ability which in turn may effect students' educational aspirations and academic achievement. Methods of education in schools involving parents and other significant others (adult relatives) should be developed.[6]

If schools were to be designed on the basis of the theory and findings of this research and related research, curricula and programs, the resources of community, family, and schools would be geared towards enhancing the self-concept of ability of all children.

The main function of schools will not be sorting and labeling students and putting the round pegs in round holes by using the assumed criterion that learning ability among students is differentially distributed due to inborn differences. Early selection, grouping and streaming practices based upon assumed level of fixed ability would not be practiced in schools. The task of educators would be to create conditions which would facilitate the process of

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[4]H.A.S. Zahran, "The Self-Concept in Psychological Evidence of Adolescents," British Journal of Educational Psychology, 37:225-240 (June 1967).

[5]A. O. Haller, et al., "Identifying Significant Others and Measuring their Expectations for a Person," Sociological Abstracts 27:5 (1969), Suppl. 6, p. 10.

[6]I. F. Svadosky, "Family and School," International Review of Education, Vol. XVI (1970), pp. 341-349. Savadosky discusses the connection between family and schools in the Soviet Union.

self-concept enhancement as early as possible and to exercise judicious surveillance.[7]

The social responsibility of schools would be to increase the "collective ability level" of the students and, ultimately all of society.[8]

The self-fulfilling prophesies that perpetuate social inequalities through schools by means of selection and other processes would be analyzed in the light of contemporary demand for social equality and social justice in the distribution of social rewards.

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[7]Erickson, "A Study of the Normative Influence . . .," p. 88.

[8]Robert Faris, "The Ability Dimension in Human Society," American Sociological Review (Dec. 26, 1961), pp. 835-842.

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APPENDICES

APPENDIX A

SELF-CONCEPT OF ADADEMIC ABILITY SCALE

Circle the letter in front of the statement which best answers each question.

1. How do you rate yourself in school ability compared with your close friends?

    a. I am the best
    b. I am above average
    c. I am average
    d. I am below average
    e. I am the poorest

2. How do you rate yourself in school ability compared with those in your class at school?

    a. I am among the best
    b. I am above average
    c. I am average
    d. I am below average
    e. I am among the poorest

3. Where do you think you would rank in your class in high school?

    a. among the best
    b. above average
    c. average
    d. below average
    e. among the poorest

4. Do you think you have the ability to complete college?

    a. yes, definitely
    b. yes, probably
    c. not sure either way
    d. probably not
    e. no

5. Where do you think you would rank in your class in college?

    a. among the best
    b. above average
    c. average
    d. below average
    e. among the poorest

6. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think it is that you could complete such advanced work?

    a. very likely
    b. somewhat likely
    c. not sure either way
    d. unlikely
    e. most unlikely

7. Forget for a moment how others grade your work. In your own opinion how good do you think your work is?

   a. my work is excellent
   b. my work is good
   c. my work is average
   d. my work is below average
   e. my work is much below average

8. What kinds of grades do you think you are capable of getting?

   a. mostly A's (85% to 100%)
   b. mostly B's (75% to 84%)
   c. mostly C's (60% to 74%)
   d. mostly D's (50% to 59%)
   e. mostly E's or F's (0% to 49%)

APPENDIX B

PERCEIVED EVALUATIONS OF STUDENT'S ACADEMIC ABILITY BY OTHERS SCALES

1. Best Friend
2. Parents
3. Teachers
4. Principals
5. Counselors
6. Priests or Ministers

1. Think about your closest friend at school. Now answer the following questions as you think this FRIEND would answer them.

   1. How do you think this FRIEND would rate your school ability compared with other students your age?

      a. Among the best
      b. Above average
      c. Average
      d. Below average
      e. Among the poorest

   2. Where do you think this FRIEND would say you would rank in your high school graduating class?

      a. Among the best
      b. Above average
      c. Average
      d. Below average
      e. Among the poorest

   3. Do you think that this FRIEND would say you have the ability to complete college?

      a. Yes, definitely
      b. Yes, probably
      c. Not sure either way
      d. Probably not
      e. Definitely not

   4. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think this FRIEND would say it is that you could complete such advanced work?

      a. Very likely
      b. Somewhat likely
      c. Not sure either way
      e. Somewhat unlikely
      d. Very unlikely

   5. What kind of grades do you think this FRIEND would say you are capable of getting in general?

      a. Mostly A's (85% to 100%)
      b. Mostly B's (75% to 84%)
      c. Mostly C's (60% to 74%)
      d. Mostly D's (50% to 59%)
      e. Mostly E's] (0% to 49%)
         or F's]

2. Please answer the following questions as you think your PARENTS would answer them. If you are not living with your parents answer for the family with whom you are living.

   Circle the letter in front of the statement that best answers each question.

1. How do you think your PARENTS would rate your school ability compared with other students your age?

   a. Among the best
   b. Above average
   c. Average
   d. Below average
   e. Among the poorest

2. Where do you think your PARENTS would say you would rank in your high school graduating class?

   a. Among the best
   b. Above average
   c. Average
   d. Below average
   e. Among the poorest

3. Do you think that your PARENTS would say you have the ability to complete college?

   a. Yes, definitely
   b. Yes, probably
   c. Not sure either way
   d. Probably not
   e. Definitely not

4. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think your PARENTS would say it is that you could complete such advanced work?

   a. Very likely
   b. Somewhat likely
   c. Not sure either way
   d. Somewhat unlikely
   e. Very unlikely

5. What kind of grades do you think your PARENTS would say you are capable of getting in general?

   a. Mostly A's (85% to 100%)
   b. Mostly B's (75% to 84%)
   c. Mostly C's (60% to 74%)
   d. Mostly D's (50% to 59%)
   e. Mostly E's] or F's] (0% to 49%)

3. Think about your favorite teacher--the one you like best; the one you feel is most concerned about your schoolwork. Now answer the following questions as you think this TEACHER would answer them.

   Circle the letter in front of the statement which best answers each question.

   1. How do you think this TEACHER would rate your school ability compared with other students your age?

      a. Among the best
      b. Above average
      c. Average
      d. Below average
      e. Among the poorest

2. Where do you think this TEACHER would say you would rank in your high school graduating class?

   a. Among the best
   b. Above average
   c. Average
   d. Below average
   e. Among the poorest

3. Do you think that this TEACHER would say you have the ability to complete college?

   a. Yes, definitely
   b. Yes, probably
   c. Not sure either way
   d. Probably not
   e. Definitely not

4. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think this TEACHER would say it is that you could complete such advanced work?

   a. Very likely
   b. Somewhat likely
   c. Not sure either way
   d. Somewhat unlikely
   e. Very unlikely

5. What kind of grades do you think this TEACHER would say you are capable of getting in general?

   a. Mostly A's (85% to 100%)
   b. Mostly B's (75% to 84%)
   c. Mostly C's (60% to 74%)
   d. Mostly D's (50% to 59%)
   e. Mostly E's] or F's] (0% to 49%)

4. Think about your PRINCIPAL. Now answer the following questions as you think your PRINCIPAL would answer them.

   Circle the letter in front of the statement which best answers each question.

   1. How do you think your PRINCIPAL would rate your school ability compared with other students your age?

      a. Among the best
      b. Above average
      c. Average
      d. Below average
      e. Among the poorest

   2. Where do you think your PRINCIPAL would say you would rank in your high school graduating class?

      a. Among the best
      b. Above average
      c. Average
      d. Below average
      e. Among the poorest

3. Do you think that your PRINCIPAL would say you have the ability to complete college?

   a. Yes, definitely
   b. Yes, probably
   c. Not sure either way
   d. Probably not
   e. Definitely not

4. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think your PRINCIPAL would say it is that you could complete such advanced work?

   a. Very likely
   b. Somewhat likely
   c. Not sure either way
   d. Somewhat unlikely
   e. Very unlikely

5. What kind of grades do you think your PRINCIPAL would say you are capable of getting in general?

   a. Mostly A's (85% to 100%)
   b. Mostly B's (75% to 84%)
   c. Mostly C's (60% to 74%)
   d. Mostly D's (50% to 59%)
   e. Mostly E's] (0% to 49%)
      or F's]

5. Think about your favoriate COUNSELLOR the one you like best; the one you feel is most concerned about your schoolwork. Now answer the following questions as you think this COUNSELLOR would answer them.

   Circle the letter in front of the statement which best answers each question.

   1. How do you think this COUNSELLOR would rate your school ability compared with other students your age?

      a. Among the best
      b. Above average
      c. Average
      d. Below average
      e. Among the poorest

   2. Where do you think this COUNSELLOR would say you would rank in your high school graduating class?

      a. Among the best
      c. Above average
      d. Average
      d. Below average
      e. Among the poorest

   3. Do you think that this COUNSELLOR would say you have the ability to complete college?

      a. Yes, definitely
      b. Yes, probably
      d. Not sure either way
      d. Probably not
      e. Definitely not

4. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think this COUNSELLOR would say it is that you could complete such advanced work?

   a. Very likely
   b. Somewhat likely
   c. Not sure either way
   d. Somewhat unlikely
   e. Very unlikely

5. What kind of grades do you think this COUNSELLOR would say you are capable of getting in general?

   a. Mostly A's (85% to 100%)
   b. Mostly B's (75% to 84%)
   c. Mostly C's (60% to 74%)
   d. Mostly D's (50% to 59%)
   e. Mostly E's] or F's] (0% to 49%)

6. Think about your favorite PRIEST OR MINISTER--the one you like best; the one you feel is most concerned about your school work. Now answer the following questions as you think this PRIEST OR MINISTER would answer them.

   Circle the letter in front of the statement which best answers each question.

   1. How do you think this PRIEST OR MINISTER would rate your school ability compared with other students your age?

      a. Among the best
      b. Above average
      c. Average
      d. Below average
      e. Among the poorest

   2. Where do you think this PRIEST OR MINISTER would say you would rank in your high school graduating class?

      a. Among the best
      b. Above average
      c. Average
      d. Below average
      e. Among the poorest

   3. Do you think that this PRIEST OR MINISTER would say you have the ability to complete college?

      a. Yes, definitely
      b. Yes, probably
      c. Not sure either way
      d. Probably not
      e. Definitely not

   4. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think this PRIEST OR MINISTER would say it is that you could complete such advanced work.

      a. Very likely
      b. Somewhat likely
      c. Not sure either way
      d. Somewhat unlikely
      e. Very unlikely

5. What kind of grades do you think this PRIEST OR MINISTER would say you are capable of getting in general?

a. Mostly A's (85% to 100%)
b. Mostly B's (75% to 84%)
c. Mostly C's (60% to 74%)
d. Mostly D's (50% to 59%)
e. Mostly E's or F's] (0% to 49%)

APPENDIX C

SIGNIFICANT OTHERS QUESTIONNAIRES

1. General Significant Others
2. Academic Significant Others

1. There are many people who are important in our lives. In the space below, list the names of the people who you feel are important in your life. Please indicate who each person is.

Names	Who Is This Person?

If you finish before the time limit, please sit quietly. DO NOT TURN THE PAGE.

2. There are many epople who are concerned about how well young people do in school. In the space below, list the names of the people you feel are concerned about how well you do in school. Please indicate who each person is.

Names	Who Is This Person?

If you finish before time limit, please sit quietly. DO NOT TURN THE PAGE.

APPENDIX D

SPECIFIC SUBJECT SELF-CONCEPT OF ABILITY SCALE

Now we would like to again answer some of the same questions, but this time about four different subjects which you are now taking or have taken in the past.

Circle the "X" under the heading which best answers the question. Answer for all six subjects. (You will have one "X" circled on each line.)

1. How do you rate your ability in the following school subjects compared with your close friends?

	I am the poorest	I am below average	I am average	I am above average	I am the best
Math	X	X	X	X	X
English	X	X	X	X	X
History and Geography	X	X	X	X	X
Science	X	X	X	X	X
Literature	X	X	X	X	X
French	X	X	X	X	X

2. How do you rate your ability in the following school subjects compared with those in your class at school?

	I am the poorest	I am below average	I am average	I am above average	I am the best
Math	X	X	X	X	X
English	X	X	X	X	X
History and Geography	X	X	X	X	X
Science	X	X	X	X	X
Literature	X	X	X	X	X
French	X	X	X	X	X

3. Where do you think you would rank in your high school graduating class in the following subjects?

	Among the poorest	Below average	average	Above average	Among the best
Math	X	X	X	X	X
English	X	X	X	X	X
History and Geography	X	X	X	X	X
Science	X	X	X	X	X
Literature	X	X	X	X	X
French	X	X	X	X	X

4. Do you think you have the ability to do college work in the following subjects?

	No	Probably not	Not sure either way	Yes, probably	Yes definitely
Math	X	X	X	X	X
English	X	X	X	X	X
History and Geography	X	X	X	X	X
Science	X	X	X	X	X
Literature	X	X	X	X	X
French	X	X	X	X	X

5. Where do you think you would rank in your college class in the following subjects?

	Among the poorest	Below average	average	Above average	Among the best
Math	X	X	X	X	X
English	X	X	X	X	X
History and Geography	X	X	X	X	X
Science	X	X	X	X	X
Literature	X	X	X	X	X
French	X	X	X	X	X

6. How likely do you think it is that you could complete advanced work beyond college in the following subjects?

	Most likely	Unlikely	Not sure either way	Somewhat likely	Very likely
Math	X	X	X	X	X
English	X	X	X	X	X
History and Geography	X	X	X	X	X
Science	X	X	X	X	X
Literature	X	X	X	X	X
French	X	X	X	X	X

7. Forget for a moment how others grade your work. In your own opinion how good do you think your work is in the following subjects?

	My work is much below average	My work is below average	My work is average	My work is good	My work is excellent
Math	X	X	X	X	X
English	X	X	X	X	X
History and Geography	X	X	X	X	X
Science	X	X	X	X	X
Literature	X	X	X	X	X
French	X	X	X	X	X

8. What kind of grades do you think you are capable of getting in the following subjects?

	Mostly E's	Mostly D's	Mostly C's	Mostly B's	Mostly A's
Math	X	X	X	X	X
English	X	X	X	X	X
History and Geography	X	X	X	X	X
Science	X	X	X	X	X
Literature	X	X	X	X	X
French	X	X	X	X	X

APPENDIX E

ABBREVIATIONS

1. Self Concept of Academic Ability = SCA
2. Specific Subject Self-Concept of Ability = SSSCA
3. Grade Point Average = GPA
4. Perceived Evaluation of Student's Adademic Ability by Parents = PPEV
5. Perceived Evaluation of STudent's Adademic Ability by Friends = PFEV
6. Perceived Evaluation of Student's Academic Ability by Teachers = PTEV
7. Perceived Evaluation of Student's Academic Ability by Principals = PXEV
8. Perceived Evaluation of Student's Academic Ability by Councelors = PCEV
9. Perceived Evaluation of Student's Academic Ability by MInisters = PMEV