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SELF-CONCEPT AS RELATED TO ACHIEVEMENT

A Thesis

By

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Self-Concept and Achievement

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ABSTRACT

Background

This research stems from the clinical finding by Adler and Rogers that there is a definite relationship between changes in self-concept and changes in behavior, and that self-acceptance is concomitant with psychological adjustment.

This notion of self-concept has prompted much experimental research, directed to discover, first, the relationship between adjustment in terms of self-attitudes and academic achievement, and secondly, the relationship between the acceptance of one's self as evaluated by the intensity of self-ideal discrepancy, and emotional adjustment.

In connection with the first line of research, Lecky and others found, at the university level, a positive relationship between the level of achievement and the nature of the self-attitudes of the subjects.

Regarding the second line of research, Bills and his colleagues discovered that the self-ideal discrepancy was concomitant with emotional conflict and maladjustment. Chodorkoff, however, discovered a curvilinear relationship between adjustment and self-ideal discrepancy. Cowen et.al. and Haigh also related self-ideal discrepancy to verbal learning defense and perceptual defense of words associated with the trait over which there is self-ideal conflict. Also, Lecky tried to ex-

plain the relative inability to read on the basis of the conflict between the content of the reading material and the self-concept of the reader. However, inconsistencies seem to exist in the literature. Griffiths and Zimmer contest the above findings, for they found no relationship between self-concept and scholastic success or between self-ideal discrepancy and emotional conflict in their respective studies.

Problem

Definition of Problem

This research is directed towards the study of the adjustment to one's self-concept in a group of elementary school children in relation to their academic achievement.

Since adjustment can be expressed either in terms of self-attitudes and self-valuations, or in terms of self-ideal discrepancy the problem is twofold. First, it is to examine the relationship between self-concept as evaluated by direct techniques and school achievement; second, to discover the relation between self-ideal discrepancy in an elementary school child and his academic achievement

Assumptions

The present study is based on the following assumptions.

1. If self-concept at a mature level is related to academic achievement, this relationship should obtain at earlier levels of maturity unless we assume that self-concept is developmental.

2. Should the stability of the self-concept be found to exist at such an early stage, prediction of academic success on the basis of personality factors as evaluated by subjective techniques, should be possible.
3. The self-ideal discrepancy indicates a conflict-torn self-concept; this conflict should affect academic achievement which is but a special form of behavior.

Hypotheses

1. In a sample of elementary school children controlled for intelligence, there exists a positive correlation between self-concept scores and achievement scores.

2. In a sample of elementary school children controlled for intelligence, there exists a positive correlation between self-ideal discrepancy scores and achievement scores.

Experiment

40 children of the 9 to 11 age-group were selected from the 4th and 5th elementary grades of the American Community School in Beirut. Intelligence and academic achievement scores were derived for each child from standardized tests. A test of self-concept was constructed and scores on self-concept, ideal self and the self-ideal discrepancy were computed.

Results

A correlation of $+0.59$ was found between intelligence and achievement. The coefficient of correlation between self-concept scores and achievement scores was found to be $+0.56$;

the fiducial limits at the 5% level were found to be $+0.77$ and $+0.26$. Although the population is obviously above zero, the sample value of $+0.56$ is not a very reliable estimate of the population parameter.

The correlation coefficient between self-ideal discrepancy and achievement was found to be -0.34 . The fiducial limits at the 5% level were found to be $+0.03$ and -0.61 , indicating that the sample value of -0.34 is not a very reliable estimate of the population parameter.

The apparent differences in the achievement of High and Low self-ideal discrepancy scorers were insignificant.

However, self-ideal discrepancy over dumbness in school work was found to be significantly related to achievement.

Discussion

The finding that the relation between self-concept and achievement at the elementary level is not null, and that is substantially high at more advanced levels, leads one to postulate that the self-concept may be of a developmental nature, reaching different levels of maturity at different stages.

Since intelligence seems to have influenced self-concept scores towards more positiveness, it is postulated that there are two extreme stages of self-concept development; an early stage of defensiveness when the child is dependent on adult expectations, and a later stage of insight into the independence of one's self.

It appears further, that general self-ideal discrepancy does not necessarily indicate emotionality and conflict. However, conflict over dumbness in school work seemed to be related to achievement. It seems therefore, that children at the elementary level do not achieve generalized patterns which allow conflict in one area to transfer to other areas, but that presumably, conflict at that stage is specific to the particular behavioral area.

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CHAPTER I

INTRODUCTION

This research is directed towards the study of the adjustment to one's self-concept in relation to academic achievement of elementary school children. The notion of the self-concept, a relatively recent development in psychology has been offered as an alternative to psychoanalytic theories which uphold the importance of unconscious motivation in determining behavior. Thus, the self-concept idea proposes that behavior is motivated by the individual's evaluation of himself on the basis of which he sets conscious goals for himself. Adjustment to one's self-concept therefore becomes a crucial factor in the motivation of behavior, as this will be shown more clearly in the next pages. Much research has been directed towards the study of this area, that is, the self-concept as a source of motivation. No research has yet attempted however, to study the adjustment to one's self-concept in relation to academic achievement, at the elementary level. The present research is prompted by a drive to start such an attempt.

It is necessary to indicate that the issues concerning the nature and the function of the self-concept, and most important, the methodological issue of getting a valid description of the self-concept are still unsettled. As a springboard of behavior,

the self-concept has been the object of serious theoretical study and scientific investigation. In both cases, the need for a unitary factor to be considered as the core of mental life has led to the establishment of the self-concept as a stabilizing factor of personality and a basic source of motivational drive. This thesis is carried on within this same frame of reference, in that it considers the self-concept both as a factor of integration and a source of motivation.

Self-Concept and Concept of Self

It is essential to ascertain early in this work that the self-concept is not identical with the concept of self. This confusion has arisen from the fact that for long, philosophers have concentrated on the study of the concept of self, and have ascribed to it the same stabilizing role in personality structure as that ascribed to the self-concept in psychology. The term self-concept is different from the concept of self, the former being mostly, if not totally, a psychological concern, while the latter is essentially philosophical.

The concept of self is a metaphysical question concerned with the existence of the self. Does such a phenomenon as the self exist in reality, and if it does, what is its nature or essence?

However, the term "self-concept" is different in that it is a psychological issue. This issue is not concerned with the problem of the self's existence, but commences with the assumption that the self does exist, and that it perceives the world

of phenomena as it seems to be, and evaluates itself in relation to this reality-as-seen. Thus the self-concept is the picture that each individual has of himself in relation to the perceived world of phenomena. In this way, it is to be clearly distinguished from the concept of self.

These terms would be clearly differentiated if a definite distinction is drawn between phenomenological and ontological explanations concerning reality and the self. Ontology is that branch of philosophy which deals with the nature of being, that is, reality as it exists. In exploring the existence of the self, ontology concerns itself with the essence and existence of the self. Whether it may be understood and known by human experience is not of importance.

Another view is discovered in examining the phenomenological doctrine. Essentially, phenomenalism is a theory of epistemology, closely related to, if not identical with, the theory of subjective idealism. Reality, to the phenomenologists, is what seems to be, that is, the phenomena as experienced subjectively. Despite minor points of difference among the phenomenologists themselves, they generally agree that the properties of the objective world depend on individual perception. Those properties, it is implied, are brought out to light only as phenomena which correspond, in essence, to the consciousness which the individual has of those same properties.

Regarding the question of the self as a phenomenon, that is, capable of being perceived, this school believes that the

self is the only permanent object that may be experienced. Its reality or form is determined by the perception of its experiences, the perception of experiences of other selves, and of the society in which that self exists. Thus, the self-concept is really in organization of a person's subjective perceptions and attitudes towards his self.

A word may be said here about phenomenological psychology. Since psychology regards as its subject matter only that which lives, perceives, thinks, wills and values, in short the psychical world in its relation to the physical and social, one may see how easily phenomenism may fit into the field of psychology. In fact, with psychoanalysis and other psychologies which focus on the person as a living thing rather than on the individual as a conceptual abstraction, phenomenology has become more of psychological importance than philosophic. In phenomenological psychology, the "self" of the individual plays a major role, concerned only with what appears to be significant in understanding human nature and behavior.

Methods of Self-Concept Study

Psychologists investigating the self-concept of a person assume that the self is a phenomenal element in the field of human perception, having certain properties and functions, and serving as a central reference point in human behavior. But concerned psychologists belong to different schools of thought concerning this issue. The point of difference centers mostly around the methodological issue of how to reach and study this

phenomenal self. Two major approaches are distinguishable, the objective behavioral approach, and the subjective introspective or phenomenological approach.

The Objective Behavioral Approach

(a) Behaviorist School: The supporters of this method claim that a more accurate and unbiased evaluation of an individual's self-concept can be obtained by studying his behavioral patterns. It is obvious that this school springs directly from the behaviorist theory which rejects introspection as a method of psychological study. To arrive at objective knowledge, objective methods are necessary. Introspection, a highly subjective function, is not considered as a valid method. However, experiences which arise from exteroceptors are accepted as a reliable source of objective knowledge, for no question can be raised about the validity of observations of the external world. The behaviorist is, in this way, dependent on his immediate experiences, but his acceptance of them is limited to those experiences which are referred to an external object, on the assumption that such objects can enter into the experience of all observers and can, on that account, give rise to knowledge that has objective validity. It is therefore fundamental in the assessment of a person's self-concept, to rely on observable data referent to self-concept, such as behavior patterns. The recurrence of these patterns would make it possible to draw a consistent picture of the self-concept. Since the report of a single observer is not considered adequate for an objective appraisal of behavior, several observers

are requested to report on the behavior patterns concerned. Only the area on which there is agreement is taken as a basis for inference. However, the report of the person who is being studied is not sought as a rule, because it would naturally be the outcome of experiences which are referred to the self. As a matter of principle, the behaviorist discards self-referent experiences, because they cannot give rise to knowledge which is public and objective.

(b) **Projective Psychology:** Another method of objective self-concept appraisal is found in projective psychology. The projective method is based on the theory that personality is a dynamic and structured unit, revealing itself through behavior, in specific situations. Behavior is considered to reflect the integral relationship between the demands of the self and the demands of the situation, and is an attempt to adapt to these internal and external demands.¹ Thus, the observable responses of a person in specific situations are regarded psychologically consistent with personality in that situation, though not necessarily logically consistent. Also every act is taken as a revelation of the structure of personality. Projective psychologists, for instance, study the individual's self-concept by noting the "movement" responses to the Rorschach ink-blot plates, as reflected in facial expressions and postures given to figures, and other elaborations which are considered to be self-descriptive. Thus, for example,

1. John E. Bell. Projective Technique (New York, 1948), p.7

one's interpretation of an ink-blot as being a bowed man represents a perception of oneself as being bowed down by troubles.¹

Projective psychology is also concerned with exploring the unconscious areas of an individual's psychical world, basing its inferences on the Freudian concept of "projection," that inner strivings and desires which had previously been repressed because painful, are thrust out to shape the external world. It is assumed here that certain portions of personality are unconscious, which still keep a relation with the surface layers. Consequently it is possible to infer, from verbalizations and other manifest expressions of behavior, the latent structure and content of personality. The self-concept is thus seen to be rooted in the deeper layers of mental life, and cannot be studied, therefore, without reference to its unconscious affiliation.

In examining the behaviorist and projective schools, one finds, inspite of vast theoretical differences, certain basic similarities between these two schools. For both, the necessity for objective knowledge is fundamental; observable behavior serves as the tangible evidence from which inferences are drawn concerning the person's self-concept. For the behaviorist, however, only recurrent patterns of behavior as related to certain specific situations seem to be noteworthy, whereas for the projective psychologist, every act is significant. Rare responses are even given special attention, for they might be the expression of significant traits which the person normally wishes to conceal.

1. David Rapaport. Diagnostic Psychological Testing, II (Chicago, 1946), p.301.

The main difference between projective psychology and behaviorism lies in the attitude towards the causation of behavior. The former, for instance, gives importance to unconscious processes which are responsible for behavior, while the latter rejects, for lack of evidence, consciousness as a dimension of behavior, let alone the unconscious. Behavior is rather visualized only in relation with the immediate situation which occasions it.

Subjective Introspective Approach

According to this approach, the subjective self is synonymous with the phenomenal self, that is, the picture which an individual holds of himself. It is his evaluation of his abilities, talents and short-comings, the place he thinks he holds in the world and of how he conceives of reality. This approach is thus also known as the phenomenological approach.

It will be noted, nevertheless, that not all psychologists who accept this approach as a valid method of appraising the self-concept, agree on the nature of this self-concept. Their definitions have implications which cut across several orientations in psychology.

Robert Bills, for instance, defines the self-concept as the "traits and values which the individual has accepted as definitions of himself."¹ This of course implies that the phenomenal self is composed of segregated traits and values which characterize

1. Robert E. Bills, et.al. "An Index of Adjustment and Values." Journal of Consulting Psychology, XV, 1951, p.257.

the person's self-evaluation, and shows a certain preference for an atomistic theory of personality.

Carl Rogers, however makes use of a holistic frame of reference when he defines self-concept as the perceptual organization of all that an individual experiences.¹ Following the same trend in his exposition, Arthur Jersild expresses the view that when a particular system of ideas, attitudes, appraisals and commitments are experienced as definitely belonging to oneself, they form a person's "awareness of his individual existence and his conception of who and what he is."² Thus the definiteness of the self-concept would be the expression of the person's awareness of both his identity and his existence. The commitment to a certain self-concept sharpens, therefore, the consciousness of our living, and gives us distinctness from the rest of our environment. Although the product of our experience, the self-concept itself becomes autonomous and acquires a driving power.

While in Rogers and Jersild's views the emphasis is on the motivational function of the self-concept, the emphasis within the frame of reference of social psychology and anthropology is on the social origin of the self-concept. Consequently, the self-concept has been conceived of as a subjective organization of culture and its values.³ Society is credited with impressing its

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1. Carl Rogers. "Some Observations on the Organization of Personality." American Psychologist, II, 1947, p.361
 2. Arthur T. Jersild. "Self-understanding in Childhood and Adolescence." American Psychologist, VI, 1957, p.123.
 3. Gordon W. Allport. "The Ego in Contemporary Psychology." Psychological Review, L, 1943, p.451.

standards which in turn are individually perceived and organized by each person in a unique fashion. Cultural and social factors are thus considered to be crucial in the development of the self-concept.

Considering both the dynamic motivational function of the self-concept and its structural nature, it is possible to reconcile the foregoing views in the statement that the self-concept is the individual's valuation of himself with respect to both his existential and his social being, the interpretation of his own meaning and his perceptions of the world with himself as the center, organized into a singly system.¹

All these views point to the method of studying the self-concept. The person concerned is the sole examiner, and his private inspection is considered to be the most valid means of assessing his self-concept. Only those psychological tests would be employed which would aid the individual in introspecting, retrospecting or examining his self-perceptions and self-attitudes.

Psychoanalysts accuse this method with failure to recognize that defense mechanisms play a major role in distorting the picture that one holds of himself and that, therefore a person cannot always recognize his true or real self.

In answer to this objection, the phenomenologists may argue that the subjective self, be it distorted or not, is really the true self of the individual, for that is what serves as his

1. Prescott Lecky. Self-Consistency: A Theory of Personality (New York, 1945), 152-156.

reference point rather than the self as objectively appraised. A person's awareness of himself may bear little relation to conclusions reached by objective observations. Also, should an observer detect logical inconsistencies in the self-concept of a person, these might not necessarily indicate the presence of psychological conflicts within the person's mental life. Thus the individual would be the best assessor of his inner life, for it is his interpretation of things that matters, not things themselves.

IMPORTANCE OF SELF-CONCEPT

Self-Concept in Research

Of the various concepts which have been used by psychologists to serve in explaining behavior, the self-concept has come to occupy a place of honor in the thinking of a number of modern psychologists. This concept may be said to summarize the conflict between two major camps in psychology, those of psychoanalytic orientation and those less prone to delve into depth psychology.

Psychoanalysts, for instance, submit, that at the root of behavior, there are blind unconscious forces of which the subject is very dimly aware. Repressed desires and other strivings which are unacceptable to the ego, force themselves on the ego through unlawful paths, and influence behavior in a manner that escapes the notice of ordinary vigilance. The notion of the self-concept carries, on the contrary, the basic assumption that human be-

havior is largely determined by the attitudes an individual holds towards himself and the manner in which he perceives himself in relation to his surroundings. Thus, conscious processes would play a greater role in determining behavior. It is obvious that the self-concept, a conscious awareness of one's existence, is thus offering an alternative to the most popular notion of unconscious motivation. Within the frame of reference of the self-concept notion, the subject consciously conceives what and who he is; and this conception occasions, in its turn, a type of behavior that is consistent with the pictures of the perceived self.

Two other concepts commonly used in recent research on behavior and its development emphatically illustrate this trend of emphasis on conscious awareness in the study of behavior causation. These are the concepts of developmental tasks and social role, concepts which are closely related to the self-concept notion, differing only in emphasis.

Developmental Tasks

The concept of developmental tasks, best clarified by Robert Havighurst, refers to learnings prescribed for every individual at particular stages of his development, the mastery of which, at the proper time, leads to social approval, adjusted behavior and future success in the following tasks. Failure to achieve these tasks, however, leads to frustration and predisposition to further failure. These tasks are determined by biological factors, that is, the maturational level of a person

occasions certain new forms of physical activity; by social factors, that is, society gradually makes newer impositions on the individual as he grows; and by psychological factors, that is, the desire of person to master the new form of activity occasioned by his physical growth and his willingness to submit to social impositions.

The individual may quite often be unaware that he is striving to master a certain learning. At other times, the demands of society and the readiness of the body may take the initiative in setting the task without the conscious effort of the individual.¹ However, the emphasis on consciousness is obvious in that the developmental task is conceived of as a problem for the person to master consciously in order that he may achieve adjustment.

In relating the concept of developmental tasks to the idea of self-concept, one may assume that a developmental task becomes meaningful and motivating only as it comes into the perspective of a person. When the individual perceives a task and makes its mastery a conscious goal, identifying it as one that he feels adequate enough to achieve, he will readily strive towards that aim. Moreover, if the person perceives himself to be unworthy or ill-equipped to master a given task, he is not likely to strive towards that threat-producing task. Thus it seems plausible to conclude that it is not merely the emotional need, physical readiness and social pressure that set the moment

1. Caroline Tryon and Jesse Lilienthal III. "Developmental Tasks I." Fostering Mental Health in our School, (Chicago, 1950), p.78.

for certain tasks, but how strongly that task is identified with the self-concept of the individual at a certain period of development.

Social Role

The other concept, that of social role, is even more closely related to the self-concept notion. Stemming from an anthropological orientation, this theory places the emphasis on social role as a motivational force. Social role is considered as the sum-total of all the duties and obligations that an individual fulfils in accordance with his status in society. Every person has several statuses at one time, as many as he has social relationships; that is, status as a brother, as a son, as a student or as a friend. These statuses are prescribed by society with reference to age, sex, social relationships and economic, racial or religious class. A few statuses however, are left open to be achieved through competition and effort.¹ But even these achievable roles are limited by age, sex and social factors. Consequently, membership in a highly organized society may deprive an individual of making use of his special gifts, and thus reduce behavior to mere habits of living.² Any normal individual can be trained to the adequate performance of any social role entailed by a certain social status, according to this theory.

In relating this concept of social role to that of self-concept, one easily realizes that the self-concept synthesizes the many diverse roles that the individual may have to perform.

1. Ralph Linton. The Study of Man. New York Appleton Century Company. 1936. p.115.

2. Ibid. p.131.

For instance, an individual who has both a father's role in his family, and the role of a judge in his profession, may behave in a single situation in a manner which conflicts with the requirements of the other role. However, in order to maintain a consistent set of values and principles, a unified self-concept is necessary which can help to reconcile eventual contradictions in the requirements of various social roles. Thus inconsistencies in the total behavior are ironed out, and harmony would be achieved among diverse social roles of a person. Obviously, the self-concept acts as an integrator of these roles. It also seems reasonable to suppose that when the individual accepts those prescribed roles as being reflections of his own self-evaluation, they gain meaning for him and consequently motivate his behavior. He first needs to identify the prescribed roles as being in harnomy with his self-perception, in order that they may later influence his actions. In this way, his unique interpretation of the social role as related to his own resources and weaknesses will both modify the quality of the role and give his special talents a means of expression. To summarize, the demands of growth in a society cause the emergence of developmental tasks in order to facilitate the learning of roles that are universally required in that society. However, the developmental tasks may not become meaningful and effective until the individuals who have to master them have identified themselves as members of the particular society which requires these tasks, and have accepted its prescriptions as personal goals which are consistent with the over-all evaluation of themselves as unique

individuals. Both the notion of developmental tasks and that of social role are thus subordinated to the more inclusive notion of self-concept of which they are special applications.

Self-Concept in Therapy

The self-concept also plays an important role in psychotherapy. This self-concept notion developed chiefly from the basic assumption that the conscious, either expressed in the will or in the individual's private valuation of himself, is greatly responsible for guiding behavior. This idea proposed mainly in reaction to Freudian psychology, received its first systematic expression by Alfred Adler in his theory of ego-psychology.

Adlerian School

Drawing richly on phenomenological psychology, and supporting his conclusions by clinical evidence, Adler presented, as the core of his psychology, the "style of life" which influences every psychological process.¹ This style of life is conceived of as an organization of all psychological experiences that are consistent with the goals of the person and his opinions of himself and the world. In other words, all the perceptions and goals of the individual organized into a self-consistent whole, lead to the formation of a stable personality structure, whereas the assemblance of unrealistic perceptions and of false ideals incapable of achievement by the individual would lead to the formation of an inadequate

1. Alfred Adler. The Individual Psychology of Alfred Adler ed. & anntd. Heinz L, and Rowena R. Ansbacher (New York, 1956), p.2.

personality, dominated by a strong "inferiority complex."¹

Behavior, therefore, receives its specific direction from the individual's goals or self-ideal. For the vital force behind human activity is a striving for superiority over the environment, this energy having its source in the individual's inferiority-complex. But should the inferiority-complex be intensified beyond reasonable bounds, no amount of achieved superiority will suffice to compensate, or help resolve that complex. Every experience will then bring forth more defeat, since the compensation trends will not satisfy the feelings of inferiority.²

The style of life, or in other words, the self-concept of the person being so crucial in directing behavior, therapy has become for Adler, the process of helping the disturbed person to change his perceptions of reality and thus formulate realistic goals for himself. Furthermore, normal development involves the formation of a true life style that is stable. This is hoped to be achieved by freeing the life style from disruptive inferiority feelings through a proper stimulation of social interests. A self-concept based on a sense of personal worth and a true feeling of superiority is then expected to develop.

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1. "Man with a Will." Time, Atlantic ed. June 30th, 1958, p.48-50.
 2. Alfred Adler. Understanding Human Nature (New York, 1927) p.20.

Rogerian School

More recently, a new school of therapy has paved the ground for an even greater emphasis on the role of the self-concept in achieving psychological adjustment, namely, the client-centered therapy, due principally to Carl Rogers. It postulates that the motivational force behind most human behavior is derived from the individual's perceptions of reality and perceptions of his self. This drive is chiefly directed towards the enhancement, actualization and maintenance of that self.¹ These perceptions of reality and the self become organized into an integrated structure accessible to awareness, which is identified as the self-concept. This self-concept, in Rogers' findings, is formed of perceptions of direct experiences of the individual, of introjected values of parents and society and of symbolizations of sensory and visceral reactions. Furthermore, it consists of perceptions of one's characteristics and abilities, percepts and concepts of others and of the environment, includes values perceived and associated with objects and experiences; and comprises goals and ideals perceived as having negative or positive valence.²

Consequently, behavior is considered as a reaction to reality-as-perceived and, the self-concept thus becomes the

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1. Carl Rogers. Client-Centered Therapy. (Boston, 1951) p.487-492.
 2. Ibid. p.498-503.

crucial construct in personality formation, most necessary in understanding behavior. This notion is, as a matter of fact, the point of departure of Rogerian therapy. Psychological maladjustment is thought to occur when the individual denies awareness to "significant sensory and visceral experiences, which consequently are not symbolized and organized into the gestalt of the self-structure."¹ Therapy, therefore, consists of aiding the individual to make most of his experiences available to consciousness, and in resolving distorted symbolization of experiences, which result from rigidity in self-concept or from the inconsistency of new experiences with the self-concept. Therapy is concerned with developing an adaptable personality structure which is flexible enough to assimilate a variety of experiences, and yet maintain a relatively consistent and sound set of values and goals. The self-concept becomes constantly flowing, changeable and modifiable. Consequently, if rigidity of personality is expelled, there is less likelihood for defensive behavior, and a minimum of threat is felt since most of the individual's experiences are directly incorporated into the self structure, instead of being denied or distorted. Following therapy, the individual feels more in control of his behavior, has greater acceptance of himself and of his experiences, and holds a flexible, though soundly based, system of values. Psychological adjustment finally leads to a greater understanding and acceptance of

1. Ibid. p.510.

other people, and the individuality of each one is recognized and conceded to, since defensiveness is then at a minimum.

In order to bring out essential information concerning the notion of the self-concept, the following can be said:

1. The self-concept is composed of perceptions of one's characteristics, of reality and of ideals.
2. The individual reacts to reality-as-perceived in reference to his self-concept.
3. Behavior has the basic striving of self-enhancement, with the object of gaining superiority in every situation. The energy of this force depends upon the degree of one's feeling of inadequacy and inferiority.
4. A strong feeling of inadequacy hinders the acceptance and understanding of certain goals; experiences are then denied awareness, and distorted symbolization are formed.
5. An integrated, consistent and reality-adequate self-concept is concomitant with cohesive and goal directed behavior. However, an unstructured, unrealistic and disorganized self-evaluation leads to impulsive and unpurposeful reactions.

6. The self-concept structure is relatively stable, and rejects from consciousness experiences which are inconsistent with the self-evaluative picture.
- ✓ 7. The self-concept is subject to modification and change with conscious effort.
8. There is a direct relation between changes in self-perception and changes in behavior.
- ✓ 9. The feeling of self-acceptance, that is of having a self-concept with which an individual is relatively satisfied, is vital in achieving psychological happiness and in the setting of realistic goals.

RESEARCH ON THE RELATIONSHIP BETWEEN
SELF-CONCEPT AND BEHAVIOR

The self-concept view-point inspired a wealth of experimental research, all directed to discover the role of the self-concept in determining specific behavior. Much interest centered around the prediction of scholastic success since it has been widely recognized that non intellectual factors are as vital as mental aptitudes in influencing success in learning.

A review of such investigations would aid in formulating the problem for the present research and may help to clarify a few of the finer issues involved in the study.

Research within the Frame of Reference
of Personality Traits

Studies at the University level

(a) Review of earlier studies: Scholastic achievement has been studied in relation to a host of factors. A great deal of attention has been given to personality characteristics. In this respect, the trend has been chiefly to segregate certain personality traits and study them in relation to college success. The general picture of the results shows that although no linear relationship was discovered between measures of personality and those of aptitude and achievement, yet the presence of well-balanced and stable personality characteristics seemed to be conducive to the realization of academic success as predicted on the basis of intelligence, and that extreme personality trends upset the predictions.¹

1. Ross Stagner "The Relation of Personality to Academic Aptitude and Achievement." Journal of Educational Research XXVI, 1933, p.651.

Aside from this general finding on which many psychologists agree, there have been studies which sought to establish relationships between academic success and specific personality traits. For instance, introverts were found to have relatively higher marks in college than extroverts. This specific discovery was however, examined by Hendrickson and Huskey at the elementary school level, and they concluded that introversion was not found to be directly related to school success. They discovered, instead, that the achiever fell in the middle range of the introversion-extraversion continuum, with a slight tendency towards being an extrovert.¹

(b) Stagner's Study: With the above background in view, Stagner conducted a careful study, taking as his sample 250 Freshman students and making use of a battery of personality tests then in vogue, such as Laird's test on introversion-extraversion, Thurstone's Neurotic Inventory, Pressey's test on "Affectivity", Moss' Social Intelligence Test and the Bernreuter Personality Inventory. His conclusions confirmed the statement that personality factors do have a marked influence on the correlation of aptitude and achievement, in that extreme personality trends upset advantages or disadvantages in mental aptitude and lead to a level of achievement that is over and under what is normally expected. More specifically he concludes that achievers were found to have a tendency for lower self-sufficiency and possibly

1. Gordon Hendrickson and John F. Huskey. "Extraversion as a Factor Conditioning Achievement in the fifth and sixth Grades of the Elementary School." Journal of Educational Research XXV, 6-13.

lower emotionality than the non-achievers.

This study and other previous studies can be criticized on the following grounds. No valid measure of academic achievement was derived, as only teachers' grades and ratings served as measures of success. Furthermore, the practice of relating segregated personality characteristics to achievement seems questionable. It cannot reasonably be argued that the presence of certain traits in personality can dominate and guide a person's whole mode of behavior while the rest of the personality remain ineffective. This point of criticism is strengthened by scrutinizing some of the conclusions reached by such investigations, some of them boasting of ridiculously high correlations between certain traits and college success. One such study is Edward Welles' research in which he reports a +.98 correlation between the "tendency to do kindnesses on principle" and high college grades.¹

(c) Summary of most recent studies: A summary has been drawn of the significant investigations conducted on University students in recent years.² It is found that there is quite a consistent picture of the achiever's personality. He generally comes from a happy home background, has positive attitudes towards his father (if a boy), is highly self-directing, independent and self-confident. He is not afraid of losing his status and thus

1. Ross Stagner op.cit. p.657 (In Anntd: Bibliography)

2. Edgar Friedenberg and Julius Roth. Self-Perception in the University (Chicago, 1954), 7-8.

shows a high degree of interest in others and is sensitive to environmental demands. He suppresses his impulses with the exception of aggressiveness which he directs to promote his interests. He is also intellectually flexible yet controlled. The non-achiever, on the other hand, has had poor relationship with his parents and has therefore, become dependent on others and fears rejection by society. He is afraid of his aggressive tendencies and withdraws from anxiety-laden situations. He is extremely self-centered, vague in his approach to problems and exercises rigid intellectual control over himself.

It is noteworthy that the studies examined in the above summary present a remarkable consistency. However, one cannot but regard these findings with suspicion as there have been studies disproving such sharp relations between personality differences and achievement. Robert Dowd's study is an example, in which he found no personality variance among poor and high achievers of high aptitude at the University level.¹

Studies at the Elementary level

The most recent and substantial study of this kind has been conducted by Professor Haggard of the University of Chicago. One of the many theses that were written on this research was by Adma D'Heurle, on third graders.² She defines clear relationships between specific personality traits and school achieve-

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1. Robert J. Dowd. "Under-achieving students of High Capacity" Psychological Abstracts XXVII, 1953, No.2954, p.306.
 2. Adma D'Heurle and E.A. Haggard. Socialization, Personality and Mental Process unpubl: doctoral dissertation abstract. University of Chicago 1955.

ment. Utilizing a variety of techniques, such as, projective instruments, interviewing, observations and questionnaires to both children and parents, she discovered, that the achieving children persistently displayed competitiveness, aggressiveness, originality in mental activity and a rich inner life. They also showed passiveness to firmly directive parents. Thus, according to this research, adult orientation and a degree of adaptive anxiety not strong enough to endanger the integrity of the ego, are basic factors for achievement in the elementary school, while an incapacity for emotional expressiveness tends to impede the ability to reorganize stimulus material objectively and independently.¹

Research Within the Frame of Reference of Adjustment

Adjustment has been empirically studied within the framework of self-perceptions in two ways, first in terms of one's attitudes towards things, second in terms of Self-Ideal discrepancy.

Adjustment in Terms of Attitudes

Among others, Thurstone, H. Bell and P. Lecky considered adjustment as a composite of positive attitudes chiefly towards personal and social life, including health and emotional life on the personal side, and home and social relations and self-confidence in dealing with environmental demands, on the

1. Ibid. p.9.

social side.¹ Therefore, they set out to measure adjustment by means of inventories consisting of questions within the areas of personal and social life of the individual. The responses were given in the form of negative, positive or "?". Examining these tests one can safely state that they do not derive an objective measure of adjustment, but show rather, the direct appraisal of the individual's self-valuation in the mentioned areas. For instance, the measure of home relations would not describe the actual conditions of the person's family relations, but would reveal the person's adjustment to the situation in terms of his self-concept as a family member.

Such tests, despite their popular use, are subject to a few criticisms. No measure of the strength of the response is given, since a "no" response could mean for one individual, a weak no, but carry a forceful note for another. Also inventories of this kind are too obvious in purpose and too unrefined, and should be limited to use on psychologically oriented groups so as to insure valid results. An average group would be tempted to give only self-enhancing responses, not realizing the significance of the tests. The items on these tests are inadequate too, as they present very generalized situations which are difficult to respond to accurately. For instance, an item from Bell's Inventory which says, "Does either

1. Hugh M. Bell. Manual for the Adjustment Inventory: Student Form (California, 1934).
Prescott Lecky. Self-Consistency (New York, 1945), p.45.

of your parents become angry easily"¹ may well be misunderstood. The subject having no other choice but "yes" or "no" and wishing to express a "sometimes" response which he considers most accurate, may respond to "?", as a last resort. The examiner is thus left with a meaningless response.

(a) Lecky's Experiment: Lecky experimented on the relationship between adjustment and success in college.² He constructed the Individuality Record, a personality adjustment test based on Thurstone's Inventory Schedule, and included eight areas, social confidence, co-operation, family relations, optimism, sex, nervous and physical symptoms and work. He administered this Record to 500 Freshman students who were divided into four achievement groups on the basis of their scholastic records. The groups included those under probation, those warned to do better, those who were average students and those who were brilliant ones. Studying the results of the experiment, Lecky concluded that the probation students and the brilliant achievers had a higher incidence of negative attitudes towards themselves and the world than the rest of the group. The average achiever was, however, considered to be the best adjusted of the whole group. Nevertheless, Lecky expresses the doubtfulness of deriving conclusive results on the basis of such limited experiments and urges the practice of studying behavior as a whole so as to ensure valid results.³

1. Hugh Bell. The Adjustment Inventory: Student Form (California, 1934) Item No.101.

2. Lecky, op.cit. 45, 67-79

3. Ibid. p.69.

(b) Griffiths' Study: About the same time as Lecky, and using the same procedure of dividing the sample into different achievement groups, Griffiths administered the Bell Adjustment Inventory to 160 Freshman students. He then derived the arithmetic means of each group's adjustment scores and correlated them with the point-ratio mean of each group, derived as measures of their achievement levels. He reports no significant differences in the level of adjustment between the poor and brilliant achievers, and no differences in the grades of those with highly unsatisfactory adjustment scores and those with good adjustment scores.¹ He did observe, however, that the unsatisfactorily adjusted students tended to have higher grades than the very well adjusted ones, but this finding was not significant.

There seems to be one point of agreement between these two studies. Lecky and Griffiths both report that there is no difference in the level of adjustment of brilliant and poor achievers. They differ however, in that Lecky found that the best adjusted ones were the average achievers whereas Griffiths found no significant differences in the adjustment of the different achievement groups. One drawback of these studies is that mental aptitude is not given much weight in determining achievement.

1. G.R. Griffiths. "The Relationship between Scholastic Achievement and Personality Adjustment." Journal of Applied Psychology, XXIX, 1945, 360-367.

Adjustment in Terms of Self-Ideal Discrepancy

A different concept of adjustment has been derived from Rogers, Snygg and Combs, who believe that personal adjustment exists when the individual is capable of accepting all of his subjective opinions of himself and all his interpretations of reality, into the conscious concept of himself. Self acceptance is thus concomitant with adjustment.¹

In order to prove this assumption, Charles Taylor and Arthur Combs conducted a study in which they postulated that the better adjusted children would be able to accept and therefore, admit of more statements that are damaging to their self-esteem than the poorly adjusted ones. They constructed a test consisting of several aspects of behavior which children commonly indulge in but which they know are disapproved by moral and social standards and hence are self-derogatory. This test was administered to 205 sixth graders. Measures of adjustment were obtained from the California Test of Personality, Form A. The findings warranted the conclusion that the better adjusted group admitted of more self-derogatory statements than the poorly adjusted, that is, the well adjusted children were more ready to accept their own weakness than the maladjusted.²

Glen Roberts' study further supports the result by his finding that there is a positive correlation between self-ac-

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1. Carl Rogers. "On the Organization of Personality." American Psychologist II, 1947, 358-368.
 2. Charles Taylor and Arthur Combs. "Self-Acceptance and Adjustment." Journal of Consulting Psychology XVI, 1952, 89-91.

ceptance and adjustment among older people too.¹ In validating Bills' Index of Adjustment² by the free association test, he discovered that self-rejection scores on the "Index" were indicators of emotionality. Thus, by this result he confirmed the conclusion of Bills et al that personal maladjustment results in self-rejection. Self-acceptance, however has not been studied in relation to academic achievement in school or college.

A future development was to prove even more definitely the validity of the relation between self-acceptance and adjustment by testing the corollary that any discrepancy between the perceived self and the ideal self should indicate emotional maladjustment. Bills, Vance and McLean constructed a test called the Index of Adjustment and Values, which measured the self-concept, the ideal self, the self-ideal discrepancy and self-acceptance, and administered it to 237 college students. These students had to appraise the present self and the ideal self with reference to 42 trait adjectives. Self-ideal discrepancy scores were then compared with scores of adjustment as obtained from the Rorshach test, and the hypothesis was confirmed that self-ideal discrepancy indicates emotional maladjustment.³ Subsequent studies supported this result.⁴

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1. "A Study of the Validity of the Index of Adjustment and Values." Journal Consulting Psychology, XVI, 1952, 302-304
 2. Robert E. Bills, et.al. "An Index of Adjustment and Values." Journal of Consulting Psychology, XV, 1951, 257-261.
 3. Bills, et.al., op.cit. 257-261.
 4. Thomas E. Hanlon, et.al. "Congruence of Self and Ideal Self in Relation to Personality Adjustment." Journal of Consulting Psychology, XVIII, 1954, 215-218.

Herbert Zimmer's work however, casts some doubt on the above findings that self-ideal discrepancy is associated with conflict in that area. He took scores on self-ideal discrepancies of a normal and a psychoneurotic group with respect to 26 traits. Using these trait adjectives as stimulus words in a word association and a reproduction test, he employed six of the traditional complex indicators as an index of conflict, and recorded the responses of the two groups. He found no significant differences in the size of self-ideal discrepancies in conflictual and non-conflictual traits, on the whole, and on separate groups.¹

This contradiction in the results receives a plausible solution in the finding of Bernard Chodorkoff who ascertained the existence of a curvilinear relationship between adjustment and self-ideal discrepancy. He administered the Q-sort test to 30 college students to derive scores for self-ideal discrepancy, and correlated these scores with the adjustment scores derived from the Thematic Apperception Test, the Rorschach test and the Biographical Inventory. He found that among those with large discrepancies there were some who were maladjusted and some who were adjusted, but those with the smallest discrepancy were the most adequately adjusted ones. Chodorkoff offers an explanation for this result in distinguishing between the maladjusted ones who, being dissatisfied with themselves, make no attempt to change their self-perceptions, and the welladjusted ones who strive to improve themselves as a result of being dissatisfied

1. Herbert Zimmer. "Self-Acceptance and its Relation to Conflict." Journal of Consulting Psychology, 1954:18. 447-449.

with their self-concepts.¹

It is perhaps possible to conclude, therefore, that self-ideal discrepancy might indicate maladjustment. However, one ought to be careful not to concentrate all people with high discrepancies in one group, as self-ideal discrepancies may stem from different motives.

Self-Ideal Discrepancy as Related to Learning Defense

Within the frame of reference of maladjustment as a result of self-ideal discrepancy, Cowen et al attempted to study the effect of maladjustment on verbal learning.² They secured scores on self-ideal discrepancy from Bills' Index of Adjustment and Values, which they administered to 94 Freshman students. On the basis of the results, six conflict words that is, traits having large self-ideal discrepancy, and six neutral words, that is, traits having no or very small discrepancy, were selected for every subject. Each one of these words was paired with a nonsense syllable and subjects were required to learn these syllables when presented with the trait word. The learning discrepancy score was computed by taking the difference between the number of attempts made to learn syllables associated with neutral words and the number of trials made to learn syllables associated with conflict words. Consequently, the mean learning discrepancy score was derived and its departure from zero tested by a t test for matched pairs.

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1. Bernard Chodorkoff. "Adjustment and the Discrepancy between the Perceived and Ideal Self." Journal of Clinical Psychology, X, 1954, 266-268.
 2. Emory Cowen, et al. "Self-Concept Conflict Indicators and Learning." Journal of Abnormal and Social Psychology, L1, 1955, 243-245.

The results were significant, showing that conflict impeded learning. The study concluded that self-ideal discrepancy is a conflict indicator giving rise to defensiveness in learning associated with the conflict.

Self-Ideal Discrepancy as Related to Perceptual Defense

Gerard Haigh investigated the possibility of a relationship between the self-ideal discrepancy and perceptual learning.¹ He selected 48 words from counseling interviews with which a person might describe himself, and asked 27 psychology students to rate themselves with reference to their self and ideal self on these words. The words were then projected at random with a tachistoscope at progressively slower exposure time, until recognition occurred, and the exposure speed was measured. Haigh discovered that the more closely a word was identified with either the self-concept or the ideal self the more quickly it was recognized. But words associated with high threat in the form of self-ideal inconsistency were more slowly recognized. Thus, he concluded, discrepancy between the self and ideal self is a demonstrable determinant of visual perceptual defense.

However, a recent article² referred to an unpublished doctoral dissertation by G.H. Smith on "Perceptual defense, learning defense and memorial defense against threat words," from the University of Rochester (1954), in which the author

1. Gerard Haigh. "The Phenomenal Self as a Determinant of Visual Perception." American Psychologist, V (VI), 1951, 321-322.

2. Zimmer, op.cit. p.449.

reports that self-ideal discrepancies have no discernible effect on ease of perceiving, learning and remembering of trait words.

PROBLEM

General Considerations

It has been seen that some studies utilizing projective techniques agree to a certain extent, on the existence of a relationship between certain personality traits and academic achievement. However, it has not been discovered whether these objectively appraised traits coincide with the person's conscious perception of them as parts of his self-concept. Evidence is entirely lacking concerning traits which the subject feels that he himself possesses, whether or not objective measurement would reveal them as belonging to him. There is evident need therefore, to examine whether some of the objectively evaluated personality traits which have been found to relate to academic achievement would keep this relationship when they are consciously perceived as expressions of a child's self-concept. Should there be a relation between those traits and scholastic achievement, the task of studying academic success in relation to personality, would be greatly facilitated. For the use of such self-concept tests as was used in this research is more convenient than projective techniques. Educationally it is also of value to know which traits, consciously recognized as part of one's self-concept, correlate with academic achieve-

ment, since for remedial and therapeutic purposes attitudinal contents are relatively easy to modify and control at the conscious level.

Comparing college students with elementary school children with reference to personality traits, a study discovered that at the college level introverts tended to achieve well. At the elementary level, the achiever was generally found to be extroverted.¹ The achiever at university was seen to have a tendency towards lower self-sufficiency and lower emotionality than the non-achievers. Extreme personality trends such as high emotionality, high self-sufficiency and low dominance were found to lead to either higher or lower achievement than predicted on the basis of intelligence.² Furthermore, personality traits such as independence, a high degree of interest in others, self-confidence and aggressiveness, were also discovered to further college success. At the elementary school, competitiveness, aggressiveness, originality in mental life and passivity to parental orientation were found to correlate highly with school achievement.

Within the framework of adjustment, greater negative attitudes towards the self and others were detected as being related to either brilliant or poor achievement in college, while positive attitudes apparently led to adjustment and resulted in average success of university students.

1. Hendrickson and Huskey, op.cit. p.13.

2. Stagner, op.cit. p.648-660.

These findings have been made on two bases. First, self-concept in the form of attitudes towards self and others served for predicting academic success. Second, at the elementary level, personality traits as evaluated by projective tests also served to predict scholastic achievement.

Investigations which have been concerned with the conscious self-perceptions of an individual as related to his behavior have done so only in relation to specific conflict. In a study on verbal learning defense, for instance, the purpose was to relate conflict in self-concept to the learning of nonsense words paired with the conflict area alone.¹ In another case, the object of the study was to examine the effect of conflict on the perceptual recognition of words associated with that conflict.² However, evidence is still lacking concerning the effect of general self-ideal discrepancy within the various aspects of the self-concept, on behavior. More specifically, it is of interest to know whether general discrepancy signifying general, rather than specific, conflict and anxiety, influences learning behavior that is not necessarily associated with specific areas of conflict.

Assumptions

The present study starts off with the following assumptions.

1. If self-concept at a mature level is related to

1. Cowen, et.al., op.cit. 243-245.
 2. Haigh, op.cit. 321-322.

achievement, this relationship should obtain at earlier levels of maturity unless we assume that self-concept is developmental.

If the self-concept, as a driving power, is of a developmental nature, it might or might not crystallize in childhood to the point of directing behavior.

2. Should a stable self-concept be found to exist at such an early stage, prediction of academic success as has been done on the basis of personality factors as evaluated by projective techniques, should be possible on the basis of those same personality factors as evaluated by subjective tests of self-concept.

3. Self-concept is normally distributed in the population.

4. Self-ideal discrepancy is also normally distributed.¹

5. Academic achievement though requiring a certain degree of intellectual capacity does not depend entirely upon intelligence.

Definition of Problem

This research, as said earlier, is mainly directed towards the study of adjustment to one's self-concept in relation to academic achievement in elementary school children. Since adjustment to one's self-concept can be expressed either in terms of self-attitudes and self-valuations or in terms of self-ideal discrepancy, the problem will be twofold.

1. Hanlon, et.al., op.cit. p.217.

One aspect of it is to examine the relationship between the self-concept, studied with the use of direct rather than projective techniques, of a group of elementary school children and their academic achievement.

Another aspect is to discover a possible relationship between discrepancy between self-concept and ideal-self of an elementary school child and his academic achievement. This is done with the assumption that any such discrepancy between the self-concept and ideal self is an indication of a conflict-torn self-concept, and that therefore, this conflict should affect achievement.

Research so far has attempted to study whether emotional adjustment is related to the discrepancy between the self-concept and the ideal self of a person, but no endeavour to date, has been made to relate this discrepancy to general scholastic achievement at the elementary or college level.

However, if a relationship has been found to exist between self-ideal discrepancy and emotional, it should be reasonably possible to explain differences in the level of achievement in a certain field on the basis of conflicted self-valuations. This can be done with the provision that the field in which achievement is expected is meaningful to the person.

The rationale for considering academic achievement in preference to other fields is because the sample for this research is an elementary school group, whose norms are essentially middle class or above. Their chief means of gaining self-

esteem is basically through school success, due to social standards which require them to achieve in school in order to gain recognition.¹

Hypotheses

The problem of this study will be investigated in terms of a number of working hypotheses. In studying the relationship between self-concept and academic achievement at the elementary level, the following hypothesis is proposed:

- I. In a sample of elementary school children controlled for intelligence, there exists a positive correlation between the extent to which the self-concept is positively or negatively oriented and general academic achievement.

If a relationship is discovered, further interest centers around knowing whether particular areas within the self-concept can be used to predict success. This is to be tested by examining to what extent achievers can be differentiated from non-achievers on the basis of such self-concept areas. A number of such areas were singled out such as independence, adjustment to home, interest in others, self-confidence, aggressiveness and fear of rejection, and are to be studied in terms of the following questions:

- a. Are independent elementary school children better achievers than dependent ones?
- b. Are children with better home backgrounds (in terms of adjustment) better achievers?

1. Allison Davis. Social Class Influence upon Learning (Cambridge, 1949), 35-42.

- c. Are other-centered children better achievers than self-centered ones?
- d. Are self-confident children better achievers than those with little self-confidence?
- e. Are aggressive children better achievers than submissive ones?
- f. Are children who do not fear rejection better achievers than those who fear rejection?

It is further speculated that discrepancies between self-concept and ideal-self-concept may tend to cause a general psychological disturbance, which could affect a child's total achievement in school. Therefore, in operational terms, the hypotheses are proposed:

- II. In an elementary school sample, controlled for intelligence, there is a negative correlation between self-ideal discrepancy and general academic achievement.

It is recognized that discrepancy may, up to a certain point, represent a desirable adaptive kind of conflict. That is, a certain amount of discrepancy is to be expected of any child who sees goals to attain. Nevertheless, it is felt that extreme discrepancy probably underlies a disruptive kind of conflict, with which it would be impossible to function efficiently. Therefore, extreme degrees of high and low general conflict in the form of the highest and lowest discrepancies in the group might be expected to cause significant differences in academic achievement. This sub-hypothesis can be tested thus:

III. The average achievement scores of subjects having the highest self-ideal discrepancy scores is significantly lower than the average achievement scores of subjects having the lowest self-ideal discrepancy scores.

CHAPTER II

EXPERIMENT

Subjects

The experiment was carried out on a group of elementary school children of the fourth and fifth grades, who were made available for testing through the courtesy of the American Community School in Beirut. Only those students who had been in the school for over one academic year, and who had always studied in American schools were selected. They are all citizens of the United States of America. These students come from families of high and middle socio-economic status, with well-educated parents. Most of the subjects are children of professors at the American University of Beirut, the rest of them have fathers holding high administrative jobs with the American Embassy in Beirut, or with large business companies.

The age of the children was limited to the 9 to 11 year-old group.¹ The total number of subjects was 40.

Controls

In addition to age, intellectual ability was also controlled. The Beta Test, Form CM for grades 4 to 9 from the Otis Quick Scoring Mental Tests Series² was administered to the whole group, and the I.Q. was derived for each child. Two

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1. i.e. Those who had passed their 9th birthday but had not passed their 11th birthday.
 2. Arthur S. Otis, Otis Quick-Scoring Mental Ability Test (New York, 1937).

convenient cutting points were taken to divide the total group into three sub-groups, nearly equal in number, corresponding to High, Average and Low Intelligence Group, as will be shown in the following pages.

Other controls such as academic achievement and self-concept were made as the experimental design demanded, as will be seen below.

Achievement Test

The Standard Achievement Test, Elementary Battery,¹ was administered to both fourth and fifth graders in accordance with standardized instructions and procedure. Each child's level of achievement was determined in specific learning areas according to standardized norms. The summation of achievement scores in those learning areas gave a score on general academic achievement. These scores were converted to standard scores so as to facilitate statistical treatment.

Self-Concept Test

Purpose

The purpose of this test was to measure the self-concept of the subjects and their concept of their ideal-selves in relation to their perceived selves. A self-concept score and an ideal self score were obtained. The difference between these two scores for each individual represented the discrepancy between the self-concept and the ideal self.

1. Truman L. Kelley et.al. Stanford Achievement Test (New York, 1940).

The reason for developing a new instrument rather than using tests already in use for studying the self-concept, will become apparent as a brief review and evaluation of these techniques and their use follows.

Background to Self-Concept Tests

Most research dealing with measures of self-concept and ideal self has concentrated on deriving the subjects' ratings on certain trait adjectives with reference to his perceived and ideal self. For instance, trait adjectives such as "clever, friendly, stubborn"¹ were employed. A six-point scale was sometimes used to measure the strength of the trait as perceived or desired and also to derive the measure of the self-ideal discrepancy.

The difficulty of using this method with elementary school children is apparent. Concepts are not distinctly understood at this age, hence the trait words would not serve the purpose in self-evaluation or in identification of an ideal self.

Another relatively popular method of measuring the self-concept and ideal self and the discrepancy between them is by Stephenson's Q-sort technique. Forty-two cards bearing comments and remarks, descriptive of personality, are given to the subject who is required to choose the one-third of them (14) that relate most closely to himself. These chosen cards are then divided by the subject into four piles, arranging the cards in order, starting from those that are least like him to those that are

1. Robert E. Bills, et.al. "An Index of Adjustment and Values." Journal of Consulting Psychology, XV, 1951, p.259.

most like him. From the remaining two-thirds of the 42 cards, the subject is asked to cast out those cards which, according to him bear unnecessary or meaningless remarks. Following this, the remaining cards are then divided into three piles, arranged in order, starting with those that are decreasingly unlike subject's evaluation of himself.¹ Similarly the person arranges the cards with reference to his ideal self-concept. The discrepancy between the self and ideal is then derived from the difference between the first and second arrangement of the cards.

It can be readily understood why elementary school children cannot be expected to understand such a complicated procedure easily. Besides, it is time-consuming as each child must be supervised individually in order to ensure the validity of the results. Both this procedure and the previous one can be successfully used only on adults.

In 1950 a new technique was used in measuring the self-concepts of children. The subjects were required to give three answers to the question, Who Are You? This method is known as the W-A-Y technique. Answers to this question were used to examine in what light the self-concept was expressed, and to discover which roles the subjects identified themselves with, social, sexual, individualistic or other roles.²

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1. Edgar Friedenberg and Julius Roth. Self-Perception in the University (Chicago, 1954), 11-12.
 2. James F.T. Bugenthal and Seymour L. Zelen. "Investigations into the Self-Concept: The W-A-Y Technique." Journal of Personality, XVIII, 1950, 483-498.

This method is incomplete for the present purpose, because it does not provide for a measure of the ideal self. Moreover, the answers received would be too varied and complicated for purposes of categorizing and scoring.

It is Carl Rogers who is to be chiefly credited for a practical method of measuring the self-concept, the ideal self and the self-ideal discrepancy in children. Constructing a test of personality adjustment for children to 13 years of age, he included items measuring perceived and desired self and the discrepancy between them. He used items, some situational, some involving a descriptive personality trait with a fictitious hero. The subject is asked to mark if he perceives himself just like the hero or differently, and also if he wishes to be like him or not. For example: Peter is a leader. All the boys do what he says.¹

Am I just like him?	Yes								No
Do I wish to be just like him?	Yes								No

The child is required to put a mark in either one of the extreme blocks, or somewhere in between depending upon how like or unlike the hero of the situation he considered himself to be.

Rogers thus made the test realistic and meaningful to children of primary school age. They were given a definite situation and a frame of reference to measure themselves up

1. Carl Rogers A Test of Personality Adjustment (Chicago, 1951)

against. But Rogers warned that this method has its difficulties, for the procedure is not easily understood by children, and personal supervision is mandatory while administering the test, therefore groups to be tested should not be more than fifteen at one testing period.¹

Adapted Test

This arrangement was impossible with the sample used in this study, because of lack of facilities at the American Community School. A modification of the procedure was therefore adopted. The numerical scale was reduced from ten to six and changed into ratings. The physical arrangement of the question was made more intelligible to the child by putting the ratings related to self-concept in one column headed by the words I am, and those related to ideal-self in another column headed by the words I wish to be. Here is an example: Al makes new friends easily.²

I am

Exactly like him.
A lot like him.
Somewhat like him.
Not much like him.
Very little like him.
Not at all like him.

I wish to be

Exactly like him.
A lot like him.
Somewhat like him.
Not much like him.
Very little like him.
Not at all like him.

Selection of Items for the Test

(a) Rational: The phenomenal self as conceived in this study was assumed to be composed of four areas as follows: the self-

1. Ibid. See attached manual of directions.

2. See Appendix Item No.4.

evaluation of physical attributes or disabilities, of social relationships, of moral values and of feelings of adequacy. These categories were derived from a study conducted by Arthur Jersild in which he discovered that children in describing their self-concepts visualized the self in four main areas. These were: evaluation of their physical characteristics, of their immediate and social relationships, of their commitments to moral values and of their resources and defects.¹ These same categories have also been described by Rogers as areas of self-concept awareness,² and are identical with the ones adopted for this study.

Items were selected in accordance with these categories and were so constructed as to elicit responses which would indicate, first, the sense of personal worth of the individual, physically, morally and psychologically; and second, the social roles with which the subject identifies most and wants most to perform.

(b) Sources for Selection of Items: A number of items were adapted from studies on the self-concept, others by constructing situations representing values expressed by American writers which applied to the age-group studied. For instance, several items on the feeling of adequacy and on the physical evaluation of the self were adapted from Frank Barron's test of Ego-

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1. Arthur Jersild. "Self understanding in Childhood and Adolescence." American Psychologist, VI, 1951, p.123
 2. Carl Rogers. Client-Centered Therapy (Boston, 1957), p.501.

strength.¹ Others were taken from the section of the Personal-Inferiority Coefficient of Rogers' test of Personality Adjustment.² Elizabeth Sheerer's study,³ in which she defines the self-respecting person in behavioral terms was also consulted, and several of the suggested behaviors were simplified so as to apply to elementary school children and included in the test. Furthermore, some of the trait adjectives used by Bills' et.al.⁴ were converted into statements referring to specific behavioral situations and included in the test.

Other writings which were referred to for deriving situations exhibiting social or moral values in the American culture, were Jersild's book, In Search of Self,⁵ The Open Self by Charles Morris,⁶ and Cora du Bois' article on the values of American culture.⁷

Finally, only those items were selected that were agreed upon by three experts from the Department of Education of the American University of Beirut, as being understandable by the age-group under study, as embodying American social standards

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1. Frank Barron. "An Ego-strength Scale which Predicts Response to Psycho-therapy." Journal of Consulting Psychology, XVII, 1953, 325-333.
 2. Carl Rogers. A Test of Personality Adjustment. op.cit.
 3. Elizabeth T. Sheerer. "The relation between Acceptance of and Respect for Self, and Acceptance of and Respect for others..." Journal of Consulting Psychology XIII, 1949, p.170.
 4. Bills, et.al., op.cit. p.259.
 5. Arthur T. Jersild. In Search of Self (New York, 1952), Chap.3.
 6. The Open Self (New York, 1948), Chap.6.
 7. Cora du Bois. "The Dominant Value Profile of American Culture." American Anthropologist. LVII, 1955, 1232-39.

and values and as giving a measure of self-concept in its various areas.

Criteria for the Construction of Items

Items were constructed on the basis of situations which would be realistic to elementary school children and which would fall within the scope of their experience. The language used was simple. The test was further refined with the aid of an education professor from the United States of America, and words and phrases were modified or changed to eliminate confusion or vagueness. There were 41 items altogether, eight in the "physical characteristics" category, eleven in the "social relations" category, eight in the "commitment to values" category, and fourteen in the "feeling of adequacy" category. These items were not presented according to these categories but were randomly shuffled so that one could not casually detect the relationships meant among the groups of items.

Two forms of the test were made, one for boys and one for girls. Items had identical value in both tests, but boys' names used in the test for boys and girls' names in the girls test. This was done so as to avoid the factor of identification with the opposite sex.

Administration of the Test

Before administering the test, an effort was made to develop friendly relations with the subjects. The examiner had spent several weeks observing and participating in their class

procedures, so that rapport and personal contact might be established with each child. Previous to giving the test, it was explained to the subjects that the test was part of a graduate project which could only be successful with their full co-operation. They were told that they were required to give truthful responses on the test, which would be kept strictly confidential, but that they were free to omit any question which they did not wish to answer or felt unable to answer accurately. They were also informed that there were no right or wrong answers to the test items. It was explained that the test requires the subject to underline the statements under the headings of I am and I wish to be, which he considers to be most applicable to him with reference to the situation given. A sample was given to each child before the test began, and all answers were checked by the examiner to ensure that the required procedure had been understood.

Finally, a relaxed atmosphere was maintained during the test by permitting children to ask questions concerning the instructions or the meaning of certain words in the test. Care was, of course, taken not to suggest or influence the responses. There was no time limit imposed so that each child could work at his own speed.

Scoring

Three scores were obtained from this test, one measuring self-concept, one measuring ideal self and one measuring the discrepancy between the perceived and ideal self.

(a) Self-Concept Score: The score on the self-concept or the perceived self was obtained as follows. Responses were evaluated as negative or positive. A response was scored negative when it indicated the presence of self-defeating tendencies in the person, while positive responses were those which indicated self-enhancing tendencies. Both self-defeating and self-enhancing tendencies were determined on the basis of studies on American culture referred to earlier, which pointed out the desirability or undesirability of a certain behavior or personality trait. If, for instance, the response read as follows:

Red is pretty dumb in his school work.¹

I am "somewhat like him,"

it was noted as negative, for "dumbness," not being recognized as a desirable attribute in the American culture, would admittedly be an indication of self-defeat when incorporated in one's self-concept. Furthermore, a scale ranging between (-3) and (+3) corresponding to the ratings, exactly (± 3), a lot (± 2), somewhat (± 1), not much (± 1), very little (± 2), and not at all like him (± 3) was used to measure the degree of positiveness or negativeness of the response, the zero score being given for failure to respond to the item. The algebraic sum of all the subscores was taken as a measure of self-concept.

(b) Ideal-Self Score: The score on the ideal-self was derived in the same manner as the self-concept score. The same criteria as for evaluating self-concept responses were used for judging

1. See Appendix - Test for Boys, Item No.20.

a response on the ideal-self. Thus, a response which showed an aspiration in a socially undesirable direction was scored minus, and one which pointed to a socially desirable direction was given a plus score. A similar scale was utilized as in the scoring of the self-concept, whereby, the higher the aspiration the higher the plus score and vice versa. The algebraic sum of these subscores was taken as a measure of ideal-self.

(c) The Discrepancy Score: The self-ideal discrepancy score was meant to give a measure of the amount of conflict between the self as perceived and the ideal self. For each item, the distance between self-concept and the ideal self was taken as the measure of that conflict. If, for instance, the score on self-concept for any particular item was (-1) and the score on ideal-self was (+3), on the same item, the discrepancy score would be 4. The direction of the discrepancy that is, whether it was positive or negative, was disregarded, because the required measure is of the amount of discrepancy between the perception, of the ideal and real self. The sum-total of these difference scores gave a total score of self-ideal discrepancy, the nature of which will be still further elucidated in the following chapter.

Reliability

The reliability of the self-concept test was determined by the test-retest method. A random sample of 24 subjects was given the test again after an interval of nearly one month. A Pearson product moment coefficient of correlation was computed from the two sets of scores.

Below is a table showing the self-ideal discrepancy scores on both tests.

TABLE I

SELF-IDEAL DISCREPANCY SCORES OF FOURTH AND FIFTH GRADERS ON TEST-RETEST

<u>TEST</u>	<u>RETEST</u>
74	73
37	42
33	32
10	13
21	22
71	69
31	33
42	44
29	27
82	79
11	13
62	59
24	18
32	25
41	57
66	43
42	30
15	21
25	11
34	24
98	81
26	17
43	28
43	49

N = 24
r = +.92

A coefficient of correlation of $+0.92$ was found which is highly significant. We are therefore justified in considering the self-concept test as reliable.

Validity

Several attempts have been made to establish the validity of self-concept tests. A widely used method has been to correlate the test with other validated tests, chiefly those of projective orientation.¹ Scores on a given self-concept test have been compared with those of Rorschach T-A-T and word Association tests, and the correlation between the responses have been used as a measure of the validity of the test. This practice has two chief draw-backs. The first is that projective techniques have not yet been developed which concentrate on measuring only the self-concept of a person. The methods of determining this area of personality are incomplete in the existing tests, for out of a wealth of data, only relevant portions which have a bearing on the area of self-concept must be located and segregated, which makes the procedure complicated. The second weakness lies in the theoretical inconsistency involved in such a practice. The concept of "self-evaluation of a person," obviously recognizes that it is fundamentally a conscious function. Hence the comparison of the conscious self-picture with the unconscious one, (e.g. a Rorschach test), seems to be a

1. Robert E. Bills, et.al. "An Index of Adjustment and Values." Journal of Consulting Psychology, XV, 1951, 257-261.
 Glen Roberts. "A Study of the Validity of the Index of Adjustment and Values." Journal of Consulting Psychology, XVI, 1952, 302-304.

dubious procedure in attempting to establish validity. On the other hand, statistical methods usually prescribed for the validation of a self-evaluation test are based on the corroboration by means of the internal consistency of the test, of an established face-validity. This is often done by either correlating scores on individual items with the total score. In another method, two extreme groups are selected from the sample on the basis of the factor being tested, and answers to each item are compared, consequently, only those items are selected as being valid which differentiate between the divergent groups.¹ This procedure, however, does not apply in the case of a self-concept test, because any obtained "consistency" of the test would most probably be artificial. As a matter of fact, items which would go against the total score would have to be eliminated with the objective of "forcing" internal consistency on to the test, while such contradictions are possible and even probable in the self-concept of a person.

Other investigations have validated self-concept tests by interviewing, and correlating the findings with the test results.² The main requirement in this procedure is obviously expert handling of such interviews so as to render accurate results, since admission of self-defeating tendencies may be more difficult face to face than it would be on paper. Though

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1. J.B. Maller. "Personality Tests." Personality and Behavior Disorders I, ed. John McV. Hunt (New York, 1944), p.187.
 2. Robert E. Bills "Acceptance of Self as Measured by Interviews and the Index of Adjustment and Values." Journal of Consulting Psychology, XVIII, 1954, p.22.

relatively dependable, this method is too time-consuming for purposes of any study which does not aim solely at validating a self-concept test.

The least practiced but probably the most dependable method of establishing a self-concept test-validity is through clinical work for a lengthy duration of time. It is only in the complete absence of threat and owing to rapport with the investigator that the individual gives an expression of the character of his self-concept. The difficulties inherent in this process of validation are easy to see. Unless the person feels the need to be helped, he may not respond to the investigator's effort to create a suitable atmosphere. Consequently, it seems that there remains only the method of common agreement of specialists in the field. This agreement should be reached on the basis of a rational analysis of the content of the test, and a validity thus established is often called "face validity."

Three experts in the field of education and psychology were called upon to agree on the validity of the test items used for this study, in terms of their adequacy to measure specific aspects of a child's self-concept. Only those items were selected, which met with unanimous agreement. These judgements were also based on the definition of "self-concept" as conceived of in this study. Moreover, most of the items had been taken from studies where they had proven their clinical worth.¹ The struc-

1. Carl Rogers. A Test of Personality Adjustment (Chicago, 1951).
Bills, op.cit.
Elizabeth T. Sheerer. "The relation between Acceptance of and Respect for Self,...." Journal of Consulting Psychology, XIII, 1949, 169-175.

ture of the test items and the kind of responses they elicited also point to the suitability of accepting the test at its face value. As response to the statement I am would obviously warrant an answer on some aspect of the subject's self-concept, providing that the latter is co-operative and not test-wise. Similarly, responding to I wish to be would necessarily indicate a striving towards one's ideal, under the same conditions.

However, responses of the individual evaluating himself are likely to be influenced by the mood, physical condition, mental worries and other pre-test experiences of that person. His responses therefore may not represent his self-picture accurately. One of the remedies suggested for this weakness is, of course, to be assured of a high degree of reliability preferably by the test-retest method, so as to be able to place faith in the consistency of the responses. In this case, the obtained reliability is of much value in lending support to the genuineness of the established "face validity."

It appears, then, to be quite justifiable to consider the test of self-concept as having substantial validity for purposes of this study.

CHAPTER III

RESULTS

The relationship between intelligence and achievement was investigated to discover whether achievement may be predicted on the basis of intelligence in the sample. Scores obtained from the Otis' Intelligence Test and scores derived from the Stanford Achievement Test for the whole group were arranged in a chi-square table for 1 degree of freedom. χ^2 was found to be 1.38 which is insignificant, as shown in appendix II. However, a Pearson coefficient of correlation between intelligence and achievement scores of the group was computed, and found to be +.59 which is significant at the 1% level. This demonstrates a relatively high relationship between intelligence and achievement in elementary school children

Hypothesis I

In a sample of elementary school children controlled for intelligence, there exists a positive correlation between self-concept and general academic achievement.

To verify this hypothesis measures of self-concept derived from the self-concept test constructed for this purpose, and measures of general academic achievement as described earlier, were used. To control intelligence, the sample was divided into three groups with the purpose of eliminating differences in intelligence by having as much homogeneity with respect

to intelligence as possible. Another consideration in choosing the cutting points was to avoid having any group too small. These three groupings are henceforth referred to as the High, Average and Low Intelligence Groups. Three subjects had to be omitted, as one of them fell far below the Low Intelligence Group, and two others scored far above the High Intelligence Group. The number of subjects in each group were of 14, 11 and 12 in the high, average and low intelligence groups respectively, as shown in Table III. Differences in the intelligence means of these three groups were found to be significant; a t between the first and second group was 8.1, significant at the 1% level, and t between the second and third groups was 6.45, significant at the 1% level.

TABLE III

CORRELATION OF SELF-CONCEPT AND STANFORD ACHIEVEMENT
SCORES OF HIGH, AVERAGE AND LOW INTELLIGENCE
GROUPS

High Intelligence Group			Average Intelligence Group			Low Intelligence Group		
Self-Concept.	Achievement	I.Q.	Self-Concept	Achievement	I.Q.	Self-Concept	Achievement	I.Q.
39	57	113	20	43	109	-12	51	106
42	51	117	57	66	111	17	38	98
67	58	119	63	43	111	31	15	90
73	36	113	64	50	111	32	43	96
74	44	115	66	47	108	61	34	102
85	58	118	69	54	110	67	40	107
86	59	115	70	50	110	73	62	104
87	35	114	81	56	111	84	51	97
92	53	113	85	58	108	94	54	90
93	61	119	92	45	111	99	40	104
95	45	118	103	69	112	102	56	106
98	59	117				108	57	107
99	45	115						
103	67	119						
N = 14			N = 11			N = 12		
M = 116.04			M = 110.18			M = 100.42		
S = 2.24			S = 1.26			S = 4.86		
r = +.51			r = +.48			r = +.64		

The coefficient of correlation between self-concept and achievement scores were derived for each of these groups employing Pearson's r . For the High Intelligence Group $r = +.51$, in the Average Intelligence Group r was found to be $+.48$, and in the Low Intelligence Group r was $+.64$.

In order to find an estimate of the population value making use of the information available from the three samples, the hypothesis that the three sub-groups were randomly sampled from a common population was tested by the Z' transformation method using the chi-square test.¹ As X^2 was found to be insignificant, the hypothesis of random sampling is tenable. The estimate of the population r based upon the combining data of the three samples, was then found, with the same Z' transformation method, to be $+.56$. The fiducial limits at the 5% level were found to be $+.77$ and $+.26$, meaning that the population value of the correlation falls within these two limits in ninety-five cases out of a hundred. Although the population r in this case is obviously above zero, the sample value of $.56$ is not a very reliable estimate of the population parameter. For the evidence at hand indicates that any hypothesis that the population value falls within the limits of $.26$ and $.77$ would be considered tenable.

This means that although the evidence indicates that there is some correlation between self-concept scores and achievement scores, no reliable judgement can be made about the

1. Allen L. Edwards, Experimental Design in Psychological Research (New York, 1950), p.134.

size of this correlation.

(a) Are independent elementary school children better achievers than dependent ones?

In examining this problem, a score on independence as perceived within the self-concept, was derived on the basis of items 15, 16 and 37 from the self-concept test.¹ Children with high scores, that is, above the mean of the group on independence, were considered as independent, whilst the low scorers, those below the mean were considered as dependent children. The group was divided with respect to achievement on the basis of the mean for the whole group. The frequencies are shown below.

TABLE IV

CHI-SQUARE OF OBTAINED FREQUENCIES OF HIGH AND LOW INDEPENDENCE SCORES WITH HIGH AND LOW ACADEMIC ACHIEVEMENT

	High Achievement	Low Achievement	Totals
High Independence Score	15	9	24
Low Independence Score	9	7	16
Totals	24	16	40

$$\chi^2 = .156$$

Not Significant

1. See Appendix for all item numbers.

χ^2 of .156 was found which is insignificant. This result suggests that independence as a characteristic of the self-concept is not related to achievement at the elementary level.

(b) Are children with a better home background (in terms of adjustment) better achievers?

To derive a measure of home adjustment, subjectively appraised, self-concept ratings on items 35, 38, 41 and 40 were considered. The same procedure as above was followed.

TABLE V

OBTAINED FREQUENCIES OF HIGH AND LOW ADJUSTMENT-TO-HOME SCORES WITH HIGH AND LOW ACADEMIC ACHIEVEMENT

	High Achievement	Low Achievement	Totals
High Score on Home Adjustment	15	6	21
Low Score on Home Adjustment	9	10	19
Totals	24	16	40

$$\chi^2 = 2.56$$

Not Significant

This χ^2 of 2.56 is insignificant and no relation between achievement and adjustment to home, evaluated subjectively, has been demonstrated.

(c) Are other-centered children better achievers than self-centered ones?

Items selected to measure other-centered versus self-centered tendencies within the self-concept were 4, 9, 11, 14 and 17. A chi-square table with respect to other-centeredness

and achievement is presented below.

TABLE VI

OBTAINED FREQUENCIES OF OTHER-CENTERED AND SELF-CENTERED CHILDREN WITH HIGH AND LOW ACADEMIC ACHIEVEMENT

	High Achievement	Low Achievement	Totals
Other-Centered Children	16	9	25
Self-Centered Children	8	7	15
Totals	24	16	40

$$\chi^2 = .443$$

Not Significant

χ^2 is insignificant, so the observed differences are likely to have arisen by chance.

(d) Are self-confident children better achievers?

Measures on self-confidence perceived within the self-concept, were derived by totalling self-concept scores on items 1, 8, 12, 20, 27, 29, 30, 32, 34 and 39. The subjects were then categorized in a 2 x 2 chi-square table as shown below.

TABLE VII

OBTAINED FREQUENCIES OF HIGH AND LOW SELF-CONFIDENCE SCORES WITH HIGH AND LOW ACADEMIC ACHIEVEMENT

	High Achievement	Low Achievement	Totals
High "Self-Confidence" Score	15	10	25
Low "Self-Confidence" Score	9	6	15
Totals	24	16	40

$$\chi^2 = 0$$

χ^2 is zero, thus revealing that no differences can be detected between achievers and non-achievers on the basis of high and low scores on self-confidence, subjectively evaluated.

(e) Are aggressive children better achievers than non-aggressive ones?

Items 6, 25 and 31 were taken to denote aggressiveness, and scores were derived as before. The subjects were then fitted into the cells of a 2 x 2 chi-square table, with achievement as the second variable, as shown below.

TABLE VIII

OBTAINED FREQUENCIES OF AGGRESSIVE HIGH AND LOW ACHIEVERS VERSUS NON-AGGRESSIVE HIGH AND LOW ACHIEVERS

	High Achievement	Low Achievement	Totals
Aggressive Children	15	8	23
Non-Aggressive Children	9	8	17
Totals	24	16	40

$$\chi^2 = .614$$

Not significant

$\chi^2 = .614$, is insignificant. Therefore, we found no evidence that self-evaluated aggressiveness makes a difference in academic achievement at the elementary level.

(f) Are children who do not fear rejection better achievers than those who fear rejection?

Fear of rejection was measured by ratings on items 22, 24, 28 and 42. The classification of the subjects in terms of fear of rejection and achievement resulted in the following chi-square table.

TABLE IX

OBTAINED FREQUENCIES OF HIGH ACHIEVERS AND LOW ACHIEVERS WITH HIGH AND LOW SCORES ON FEAR OF REJECTION

	High Achievement	Low Achievement	Totals
High Score on "Fear of Rejection"	16	10	26
Low Score on "Fear of Rejection"	8	6	14
Totals	24	16	40

$$\chi^2 = .075$$

Not Significant

χ^2 equalling .075 is insignificant. This warrants the conclusion that fear of rejection as perceived within the self-concept of an elementary school child has not been shown to be related to achievement.

Hypothesis II

A. In an elementary school sample controlled for intelligence, there is a negative correlation between self-ideal discrepancy and general academic achievement.

In order to verify this hypothesis, three scores were obtained, those of self-ideal discrepancy, of academic achievement and of intelligence. In controlling intelligence, three groups corresponding to high, average and low intelligence groups were sorted out, as indicated before. A Pearson coefficient of correlation formula was utilized to estimate the correlation between the self-ideal discrepancy scores and the achievement scores for each one of these three groups. The scores may be examined in Table X.

TABLE X

DISTRIBUTIONS OF SELF-IDEAL DISCREPANCY AND ACHIEVEMENT SCORES OF THE HIGH, AVERAGE AND LOW INTELLIGENCE GROUPS

High Intelligence Group			Average Intelligence Group			Low Intelligence Group		
Discrepancy	Achievement	I.Q.	Discrepancy	Achievement	I.Q.	Discrepancy	Achievement	I.Q.
10	45	115	11	69	112	7	40	104
12	58	119	23	45	111	13	40	107
15	67	117	32	58	108	15	50	94
22	53	118	33	56	111	15	57	107
23	61	119	41	54	110	24	51	97
24	45	119	41	47	108	24	56	106
24	58	118	43	50	111	31	34	102
25	59	113	43	50	110	37	62	104
29	59	115	49	43	111	52	38	98
31	35	114	66	66	111	66	15	90
32	44	113	70	43	109	71	43	96
36	36	113				82	51	106
56	51	117						
62	57	115						
N = 14			N = 11			N = 12		
r = -.15			r = -.53			r = -.40		

The coefficients of correlation for the three groups were, respectively, $r_1 = -.15$, $r_2 = -.53$ and $r_3 = -.40$. The hypothesis that the three samples have been randomly sampled from a common population was tested with the same technique as shown before and was accepted. The estimate of the population r upon the combined data of these three samples was found to be $-.34$. The fiducial limits at the 5% level was found to be $+.03$ and $-.61$. As this indicates that any hypothesis that the population value falls within the limits of $+.03$ and $-.61$ would be con-

sidered tenable, the sample value of $-.34$ is not a very reliable estimate of the population parameter. Concerning the relationship between self-ideal discrepancy and academic achievement it is not possible to reliably postulate the existence of a significant correlation between self-ideal discrepancy scores and achievement scores.

Since the relationship was found unreliable the following sub-hypothesis was examined.

B. The average achievement score of subjects with highest self-ideal discrepancy scores is significantly lower than the average achievement score of subjects with lowest self-ideal discrepancy.

Two groups were sorted out from the sample, each comprising 10 subjects having highest discrepancy scores and 11 subjects having lowest discrepancy scores. These groups are here referred to as the Highest Discrepancy Scorers and Lowest Discrepancy Scorers respectively. The two groups were matched for intelligence, since the I.Q. averages were found not to differ significantly.

The means of the achievement results of each group were tested for significance by means of the t test for small matched groups.

TABLE XI

DISTRIBUTIONS OF I.Q. AND ACHIEVEMENT SCORES OF 11 LOWEST
AND 10 HIGHEST SELF-IDEAL DISCREPANCY SCORERS

Lowest Discrepancy Scorers			Highest Discrepancy Scorers		
Discrepancy	I.Q.	Achievement	Discrepancy	I.Q.	Achievement
7	104	40	49	111	43
10	115	45	52	98	38
11	112	69	56	117	51
12	119	58	62	113	57
13	107	40	66	90	15
15	107	57	66	111	66
15	94	50	70	108	47
15	119	67	71	96	43
22	113	63	74	127	63
23	119	61	82	106	51
23	111	45			

$$M_1 = 110 \quad M'_1 = 53.18$$

$$S_1 = 6.8 \quad S'_1 = 9.38$$

$$M_2 = 107.7 \quad M'_2 = 47.4$$

$$S_2 = 10.74 \quad S'_2 = 13.07$$

t of Achievement Means = 1.56 (Not Significant)

t of I.Q. Means = .554 (Not Significant)

t was found to be 1.56 which is insignificant for 18 degrees of freedom. Thus the results show that the apparent differences in the average achievement of the High and Low Discrepancy Scorers are not significant, and therefore the hypothesis may be rejected.

Since the above results concerning general self-ideal discrepancy as related to academic achievement demonstrated no clear relationships, it was further hypothesized that certain conflict areas within the self-concept may be more closely

related to achievement than general conflict within the self-concept. To test this hypothesis, the self-ideal discrepancy score for each item of the self-concept test was related to academic achievement scores. Only two items gave significant results. They were items 20 and 10. Item 20 which is "___ is pretty dumb in his (or her) school-work," was found to be most significantly related to achievement out of all the items on the test. To measure this relationship, scores on self-ideal discrepancy of the whole group on Item 20 were divided into two groups, that of high and low discrepancy scores using the mean of the total sample as the cutting point. These scores were then arranged in a chi-square table for 1 degree of freedom, with respect to high and low achievement scores.

TABLE XII

OBTAINED FREQUENCIES OF CHILDREN WITH HIGH AND LOW SELF-IDEAL DISCREPANCY SCORES ON ITEM 20 AND HIGH AND LOW ACADEMIC ACHIEVEMENT

	High Achievement	Low Achievement	Totals
High Discrepancy Score	10	12	22
Low Discrepancy Score	14	4	18
Totals	24	16	40

$$\chi^2 = 4.23$$

Significant at
.05 level

χ^2 being 4.23 and significant at the 5% level, it is justifiable to conclude that self-ideal conflict over dumbness in school-work is related to academic achievement in the elementary school, the direction being such that low achievement is found, more often than not, associated with high discrepancy.

Item No.10 which is "___ often cheats while playing games or taking tests, was also analyzed. Self-ideal discrepancy scores on this item were divided as indicated earlier into high and low discrepancy scores and related with high and low achievement scores in a 2 x 2 chi-square table as shown below.

TABLE XIII

OBTAINED FREQUENCIES OF CHILDREN WITH HIGH AND LOW SELF-IDEAL DISCREPANCY SCORES ON ITEM 10 AND HIGH AND LOW ACADEMIC ACHIEVEMENT

	High Achievement	Low Achievement	Totals
High Discrepancy Score	5	8	13
Low Discrepancy Score	19	8	27
Totals	24	16	40

$$\chi^2 = 3.71$$

Insignificant

For 1 degree of freedom, χ^2 is significant at the 6% level. This indicates that self-ideal conflict over "cheating" seems to be related to academic achievement in the elementary school. However, since the level of significance is less than the conventional 5% level, this finding has to be regarded with caution.

DISCUSSION

The present research indicates that the correlation between self-concept and academic achievement in the elementary school is not null. There is evidence that some relationship exists between a positively oriented self-concept and high academic achievement, and vice versa. However, there is no evidence that this relationship is reliably high.

This finding may not be very meaningful by itself, but when seen in relation to other research findings, it gains great significance. Previous research, for instance, has found a relatively strong relationship between self-concept and academic achievement, at the college level. At its face value, this finding contradicts the findings of the present research. However, it is possible to postulate that the self-concept is the outcome of a developmental process. At different stages, it reaches different levels of maturity. This can be explained by estimating that the self-concept first grows out of self-perceptions which reflect the special life conditions of a person, such as his successes or failures. That is, at early stages, self-perception must be mainly determined by the achievements of the person, as evaluated by him and society. Different levels of achievement will thus, in time, produce different orientations in self-conception.

With maturity, various self-perceptions must crystallize and get integrated into a unified structure, recognized

as the self-concept. It is possible that this self-concept then gains relative autonomy and acts in its own right, not necessarily as an echo to personal achievements, but as a determiner of behavior, and possibly thereby of academic achievement. This is based on the assumption that certain personality functions may first originate in response to inner urges, but that these functions gain in time enough structure that they grow independent of those urges that originally gave rise to them. The personality structure thus developed acquires in fact secondary, nonetheless significant, motivational power.

The developmental nature of the self-concept can still be seen in clearer light by noting that there seems to be a significant positive relationship between self-concept scores and intelligence scores. That is, children of high intelligence scored significantly higher on self-concept than children of lower intelligence.¹

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1. Chi-square technique was used to test the discrepancy between high and low intelligence groups on self-concept.

Obtained Frequencies of Subjects with High and Low Scores on Intelligence and Self-Concept

	High Self-Concept	Low Self-Concept	
High Intelligence	13	4	17
Low Intelligence	10	13	23
	23	17	40

χ^2 was found to be 4.26, significant for 1 d.f. at the 5% level.

This probably means that intelligence was instrumental in influencing the subjects to give responses that are socially desirable, rather than accurately self-descriptive. There was a tendency for the intelligent child to give more positive answers, possibly in an attempt to display only his better side and thereby gain the favor of adult figures.

This defensiveness may have been the cause for the covering up of much anxiety which self-derogatory test items must have produced in reality.

It is possible therefore to postulate two extreme stages of self-concept development, an early stage characterized by defensiveness, and an optimal stage characterized by relatively greater insight into the independence of one's self. To fixate ideas, the defensiveness of the first stage expresses itself in that the subjects, still dependent on adult figures, do not seem to realize that they can conceive of themselves in terms other than those likely to be approved by those adults. The real concept that the child might have of himself and his existence is thought in this way to be kept under cover by the more pressing demand to live up to adult expectations. On the contrary, the ability to see clearly into oneself requires that the subject achieve a great measure of independence and realize that he has a unique existence.

However, with the use of indirect and projective techniques, Haggard and D'Heurle were able to substantiate a firm relationship between certain personality patterns and academic

achievement at the elementary level. If no such relationship was discovered by the present research, it is partly due, among other reasons which will be elucidated later, to the difficulty of obtaining a true picture of the self-concept of children by the use of direct techniques. This probably means that the self-concept picture, as derived from direct tests, would not tally in all cases with conclusions drawn from projective data. What, for instance, indicates aggressiveness for the projective psychologist might very well mean something totally different for the child. This again reinforces the conclusion that at early stages, the defensiveness of the child, as indicated by the evident intervention of their intelligence in responding to test situations where the factor of intelligence should be minimal, may distort his self-concept.

Another significant finding that this research indicates is that self-ideal discrepancy does not seem to be related to general academic achievement at the elementary school level.

As such, this finding throws doubt on the assumption borne out by previous research, that self-ideal discrepancy indicates emotionality and conflict. For self-ideal discrepancy did not seem, according to the present research, to relate to any perturbations in the behavior of the subjects with respect to academic achievement.

However, the present research also indicates that there is a definite relationship between the attitude towards dumbness in school work, and the level of academic achievement. Students

who were admittedly conflicted over dumbness in school work had a significantly lower achievement than those with no or little conflict.

An important question arises at this point as to why is there a relationship between self-ideal discrepancy with respect to intelligence, and academic achievement, while there is no evidence of such a relationship between the general self-ideal discrepancy and academic achievement?

It is plausible that children at the elementary level would not have achieved such generalized patterns of response that it would be possible for conflict in one area to transfer to other areas. It seems, on the contrary, that conflict, at that stage, is specific to the particular behavioral area. That is, intelligence is definitely of concern to students in relation to their school work; any conflict over it would therefore affect academic achievement. Other areas of self-concept that were measured in this research did not refer directly to school situations. Consequently, conflict in those areas did not seem to transfer to academic achievement.

This conclusion is reinforced by the findings of Cowen and Haigh who found that conflict within the self-concept caused learning defense or perceptual defense only with respect to areas that were related to that conflict.

This conclusion points out the possibility that the study of specific conflict areas within the self-concept, rather than the study of a general atmosphere of self-ideal conflict,

may provide a better basis for the understanding of children's behavior.

Two other factors seem to account for the lack of relationship between self-ideal discrepancy and academic achievement.

First, there was a tendency for the more intelligent subjects to have lower scores on self-ideal discrepancy.¹ Intelligence may thus have entered as a major determinant of self-ideal discrepancy, and caused the discrepancy scores not to be true self-ideal discrepancy scores.

Second, as Chodorkoff found both well-adjusted and maladjusted people with high self-ideal discrepancies, the high self-ideal discrepancy group of this research includes both achievers and non-achievers. If we take high achievement to indicate a tendency for self-enhancement, and low achievement a tendency for self-defeat, discrepancies resulting from such opposed sources as those two tendencies would have been treated as identical. As a matter of fact, the present research

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1. Obtained Frequencies of Subject with High and Low Scores on Intelligence and Self-Ideal Discrepancy

	High Discrepancy	Low Discrepancy	
High Intelligence	4	13	17
Low Intelligence	19	4	23
	23	17	40

$\chi^2 = 6.80$, significant at the 1% level.

had assumed that any discrepancy, regardless of its positive or negative orientation, should indicate conflict. Since this assumption does not seem to be substantiated, it is perhaps necessary to first make a distinction between the two kinds of self-ideal discrepancy, and then examine the relation of each with achievement. This is to underline the importance that should attach in future research, to the orientation of the motive or the force underlying self-ideal discrepancy.

IMPLICATIONS

The present study bears out a number of implications for both research and education.

1. In constructing a self-concept test for the purpose of relating its results to academic achievement, it seems that the selection of items should be of situations that are directly related to academic work. This implication stems from the finding that among all the situations in the self-concept test utilized for this study, those situations directly associated with academic work were seen to be most significantly related to achievement. However, more research is needed for the confirmation of this implication. For, although a self-concept test inviting an expression of attitudes that are specific to the variable of concern seems to be a valuable approach, it is essential to examine the effect of intelligence on such a test.

The present research used a direct, but non-specific, technique to measure the self-concept. It appeared that the subjects were not inclined to reveal their inner life openly, but that they wished to conform to social expectations. This is evidenced by the fact that intelligence significantly influenced the responses towards more positiveness. To be sure, it is advisable to reserve the use of such tests for an advanced stage of maturity where it is possible to draw an honest and true expression of self-concept, freed as much as possible, from the interference of intelligence. However, more research is needed to settle whether a direct self-concept test, made of items that are specific to the variable examined in relation to self-concept, would be also "contaminated" with the factor of intelligence.

2. This study implies that the formation of the self-concept is of a developmental nature. It would be valuable to study the progress of its development and discover at what stage it becomes stable and crystallized enough to serve as a motivational source.

3. Since no relationship has been found between self-concept and academic achievement, it becomes necessary to consider with caution Lecky's proposition that the inability of American boys' to read, as compared with that of girls, can be explained on the basis of the contradiction between the masculine self-concept that boys are nourished with, and the feminine or "sissy" roles that they have to identify with in

reading books.¹ It is possible, on the contrary, that children's behavior is not controlled so much by forces and motives which have their source in their self-concept, as in other sources of pressure. Besides, masculinity is not nourished equally strongly by all families; it is relative to the social class and the position of the family in that class.

4. The research has revealed a significant relationship between the attitude towards "dumbness in school-work" and academic achievement in the elementary school. It appears therefore that the way the results of achievement are communicated is of special importance. Also, contrary to what is commonly thought, it does not seem that the knowledge of results works as an incentive in all cases. Since the direction of the causal relation between self-concept and the feeling of dumbness is not known, it is possible that the knowledge of results, in the case of a failure, may be detrimental to the self-concept and may thus lead to more failure. To increase chances for success, it is essential to foster the feeling of adequacy in school work. Hence, it becomes of importance that class results be given in terms of the progress of each child. The feeling that one is progressing is likely to reinforce self-enhancing tendencies and therefore preserve the basic feeling of self-adequacy. This in turn

1. Blair, et.al., op.cit., p.122.

would probably urge one towards setting more realistic goals, capable of attainment, and would thus minimize the self-ideal discrepancy by helping modify the attitude of weak students towards their dumbness.

APPENDIX I

TEST FOR BOYS

Name: _____

Date: _____

Grade: _____

INSTRUCTIONS

This is a test different from other tests, because it has no right or wrong answers. But when you do the test, please be sure that your answers are as true as possible. These answers will not be shown to anyone, so you don't have to worry about people knowing what you write.

Study the example below and understand how it should be done.

1. Harry runs faster than any other boy in class.

I am

Exactly like him
A lot like him
Somewhat like him
Not much like him
Very little like him
Not at all like him

I wish to be

Exactly like him
A lot like him
Somewhat like him
Not much like him
Very little like him
Not at all like him

The 1st. column has the words I am. Read what is written under it. If you think that you are "very little like Harry", then underline the words, very little like him. Or if you think you are exactly like him, underline where it says that.

Now look at the 2nd column, where I wish to be is written. Underneath, it tells how much you wish to be like Harry. So, if you wish to be somewhat like him, underline those words, or if you wish to be not at all like him, underline that. If you think you really can't give an answer to a question, don't underline anything, but it is better to try and give an answer.

REMEMBER

1. Underline only one answer in each column.
2. It is important to give true answers.

Please do not start the test until you are told to do so.

Now go back and do the example, then WAIT.

1. Joe¹ is a very good-looking boy.

I am

Exactly like him.
A lot like him.
Somewhat like him.
Not much like him.
Very little like him.
Not at all like him.

I wish to be

Exactly like him.
A lot like him.
Somewhat like him.
Not much like him.
Very little like him.
Not at all like him.

2. Tim loves to play out-door games.²
3. Rob is very polite and well-mannered when he speaks to older people.
4. Al makes new friends easily.
5. Matt looks clean and tidy when he comes to school.
6. Ted is always picking a fight with someone or other.
7. Mark worries a lot about his health.³
8. Hank is a very popular boy in school. Everybody likes him.
9. Mitch is very shy and quiet.
10. Judd often cheats while playing games or taking tests.
11. Tommy likes to have everything his own way.
12. Sonny is one of the ugliest boys in school.
13. Arthur always keeps his promises.
14. Dave just can't stand it when others tell him he is wrong.

-
1. In the Test for Girls, girls' names were used.
2. In the original, all items had the same physical appearance as Item No.1.
3. This item was discarded because the term "worries" was misunderstood by most children.

15. Jack can decide things for himself without help from his parents or teacher.
16. Abe very often copies his homework from others.
17. Hadley gets mad and very jealous if someone does better than he.
18. Fred feels sick and weak most of the time.
19. Joe is a responsible boy. He always does his work on time.
20. Red is pretty "dumb" in his school work.
21. Tim is liked better by the girls than by the boys.
22. Mark finds that the boys and girls make fun of him and play mean tricks on him.
23. Matt finds himself telling lies about small things even though he doesn't want to.
24. Dowd is disliked by the whole class.
25. Cal pushes people around and makes them listen to him.
26. Tom is a very healthy boy. He feels fit and strong.
27. Kirk is a bit "odd" and quite different from the other boys.
28. Ned finds that the boys would rather play with someone else than with him.
29. Van is never listened to when he tries to give his opinion.
30. Mitch is a very intelligent boy in class.
31. Teddy is a big strong boy. He could beat any of the boys in a fight.
32. Red is pushed around by most boys who make him do whatever they want.
33. Curt sometimes takes other people's things and doesn't return them.

34. Nicky picks only on boys or girls weaker than himself.
35. Dave feels that his parents don't love him very much.
36. Jim is very touchy. Little things upset him and he cries easily.

APPENDIX II

TABLE II

OBTAINED FREQUENCIES OF HIGH AND LOW INTELLIGENCE
SCORES WITH HIGH AND LOW ACHIEVEMENT SCORES

	High Intelligence	Low Intelligence	Totals
High Achievement	12	12	24
Low Achievement	5	11	16
Totals	17	23	40

$$\chi^2 = 1.38$$

Insignificant

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