Based on a theory of personality in which the self, considered as a perceptual agent, is defined in terms of interpersonal orientation, seven components of self-other orientation are proposed: (1) majority identification, (2) complexity, (3) power, (4) self-esteem, (5) self-centrality, (6) identification, and (7) social dependence. The self-social symbols tasks developed to measure these components require the subject to relate himself to the social environment and are primarily nonverbal in character. Four studies were conducted within this theoretical framework. Study I investigated the relation between self-concept and social desirability in 50 sixth grade white children. Study II considered the relation between self-concept and geographic mobility in 219 eighth grade students. Study III investigated developmental changes in self-concepts during adolescence based on a sample of 420 sixth through twelfth grade students. Study IV compared the self-other orientations of 100 Indian children from 10 to 14 years of age with 100 American children in the sixth through eighth grades. An appendix contains the seven self-social symbols tasks.
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SELF-SOCIAL CONSTRUCTS

OF

CHILDREN

Robert C. Ziller and Barbara H. Long

(Editors)
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INTRODUCTION

The history of the study of personality is resplendent with myriads of penetrating theories, inventive devices, and curious results, but the lack of consistency among theories, instruments and results, and the failure of most investigators to give equal emphasis to theory, instrumentation and research have left the region of investigation in a state of brilliant disarray. A study of previous approaches suggested, however, that some progress might be made by limiting the scope of the endeavor to the study of self-other orientations and by developing a balanced program of research including theory, the development of instruments evolving from the theory, and a series of studies involving the theory and instruments. The links between these three facets of a research program are crucial. Possibly the most crucial link, or at least the most neglected, has been that between theory and measurement.

The six sections of this report represent initial closure of a research endeavor which includes a relatively balanced and integrated program of research involving the development of a self-social theory of personality, the development of a series of instruments involving the same approach to the measurement of the evolving self-social constructs, followed by a series of field studies concerning the association between self-social constructs of children and their social environment. The research program was supported by a grant to the senior author by the National Science Foundation.
ABSTRACT

An interpersonal theory of personality is outlined in terms of seven self-social constructs including self esteem, complexity, power, centrality, identification, majority identification, and social dependence. Measures with minimal verbal demands which emanated from the theory are described. Four studies are reported which examine the relationships between self-social constructs and variations in social environment. These studies include social desirability, geographic mobility, developmental changes in children, and a cross cultural study of children from America and India. The approach appears to provide a new source of information about the self-other orientations of children which by inference offers new meaning to self definition in relation to the social environment.
SELF-SOCIAL CONSTRUCTS:  
THEORY AND INSTRUMENTS  

Robert C. Ziller  

Fundamental to the studies described here is an incunabular theory of personality, the basic unit of which, the self, is defined in terms of interpersonal orientations. The concept of the self as a social element is assumed to be a perceptual agent through which experience is reduced prior to assimilation. Experience is inevitably self oriented.  

At once, however, the self is inextricably related to other (Adler, Mead, 1934; Sullivan, 1953; Kelly, 1955). The meaning of the self is necessarily relational. The elements of comparison are objects, other persons, or self as perceived in the past. It is assumed that more similar elements serve as superior models for comparison or contrast. The latter assumption is a broad interpretation of one of Festinger's hypotheses in his theory of social comparison (1954): "the tendency to compare oneself with some other specific person decreases as the difference between his opinion or ability and one's own increases" (p. 120). It is now proposed that comparison with a person whose opinions deviate greatly from one's own provides less information about the self than a comparison with a person whose opinions are more proximal. It is proposed here that distal comparison leads to a dichotomy separating self and other; qualitative distinctions beyond the rudimentary metric of similar - different are not perceived as necessary or helpful in clarifying the self concept.
The other is simply and grossly categorized as different—too different to warrant closer scrutiny. For a more refined delineation of the self, a comparison of the self with persons in more proximal positions is required. Under these conditions, the point of reference is scrutinized in comparison with the reflecting personal object in order to differentiate the self from others. Under closer scrutiny the self is necessarily defined with greater clarity.

It is also assumed that memory of the self or the self as it was formerly perceived also is a less reliable point of reference than proximal others or significant others. Memory is faulty; whereas information concerning the significant other is readily available. Nevertheless, comparison with the perceived past self and presently perceived self contributes to the continuous development of the self concept. The time trace of the self concept permits a consistency within change. Moreover, the self time trace permits a projection into the future which contributes further to self predictability. It is proposed that the time trace of self is part of the function of the therapist. Through time sampling, the critical contacts with a new person provide check points by means of which the changing perception of the self may be followed with some objectivity since it is outside the normal stream of behavior.

A fundamental assumption of the theory is that self-other relations and self delineation is a universal and constant concern. Self delineation is imposed by environmental demands. Information concerning the self facilitates anticipation and adjustment to future events. Still, information seeking relevant to the self may vary among individuals. It has been proposed (Long & Ziller, 1964) that dogmatic persons are closed to new information.
In this way their convictions are inviolable and their cognitive structure remains momentarily secure. The dogmatic individual defends an insecure self structure by the expedient of restricting information input—that is, by controlling the source of data relevant to their self and social conceptual structure.

Thus, it is proposed that the self is necessarily defined in relation to concrete referents in the immediate social environment. Similarities and contrasts with elements in the social field facilitate self definition. Still relatively unexplored, however, are the processes of self-other orientation, the nature of the salient others, and the patterns of self-other orientations.

Seven components of the self-other orientation process of self definition are proposed: (a) majority identification, (b) complexity, (c) power, (d) self esteem, (e) self centrality, (f) identification, and (g) social dependence.

Majority Identification

The association or classification of the self with a general majority, the perception of similarity between self and the majority of others, or the inclusion of the self with the more dominant or pervasive others is presumed to be a significant aspect of self-other orientation. In a sense, majority identification is a gross indicator of belongingness. It is assumed that others are perceived vaguely by the individual as representing a field of objects requiring a mapping for individual reference. The mapping is presumed to involve ratio perception where the social objects with which the self is identified are somehow categorized in opposition or in contrast to the ratio of objects in the field which are classified as different or separate from the aggregate of objects including the self. The American Negro
may be a case in point.

Identification with a majority is presumed to be associated with a sense of control over the environment. One's fate is not in the hands of others to the same degree as those who identify with the minority. The governed self has a direct link with the government of self. As a consequence, the social environment is perceived as less arbitrary and more predictable and is assumed to reflect, to some degree, a projection of the self.

The perception of the self as a member of the majority is also presumed to be associated with a more open or potentially inclusive self concept. It is proposed that those who identify with the majority are inclined to perceive greater similarity between self and others accompanied by behavior leading to expanding social relations.

On the other hand, identification with the minority offers a degree of personal distinction, although again in a most gross manner. Indeed majority identification may indicate the search for anonymity as a defense against a threatening environment. Minority identification facilitates individuation or self identity; a smaller number of bits of information are required to locate the person or himself unequivocally within a group (Ziller, 1964). By identifying with a minority, the individual avoids the conditions of ego diffusion (Erikson, 1959). A more clearly portrayed self emerges. Not, however, without the accompanying loss of the advantages associated with majority identification.

In general majority identification is presumed to reflect a degree of dependence accompanied by depersonalization. Minority identification is associated with independence and personalization. As suggested elsewhere (Ziller, 1964), majority identification and minority identification may be
alternating mechanisms rather than mutually exclusive mechanisms. Although minority identification may facilitate ego identity, majority identification permits a pause or behavior plateau preparatory to self reorganization.

Complexity

The complexity of self concerns the degree of differentiation of the self concept, or in Lewin's terms (1935) the number of parts composing the whole. Expanding the theory of social comparison (Festinger, 1954), it is now proposed that an extended social frame of reference is associated with extended self dimensionality. In order to establish similarities and contrast with a wide variety of others and in the process of making these comparisons, a more highly differentiated self-social concept evolves. Continuous confrontation with diverse others is assumed to encourage closer scrutiny of the self followed by the emergence of a more highly differentiated self concept.

It is also proposed that the individual with the more complex theory concerning self-social relations is less likely to be seriously disturbed by new experiences which momentarily appear to be incongruent with the system. Thus, for example, "fixation at an early stage of development" may be more meaningfully described as a minimally differentiated self concept which according to the hypothesis of this section is subject to severe strain under conditions of new and inconsistent information. This proposition derives by extrapolation from a series of unpublished experiments by Alex Eavelas of Stanford University concerning the etiology of superstition. It was observed that persons with more complex hypotheses or theoretical systems were able to assimilate new information into the system with greater facility.
Complexity of the self concept may be similar to a characteristic of self actualization as described by Maslow (1957). Maslow suggests that in self-actualizing persons "many dichotomies, polarities, and conflicts are fused and resolved." In this manner self actualized persons are simultaneously self and unselfish, individual and social, rational and irrational, and so on. Essentially Maslow is proposing that self actualized persons are not simply described or categorized; that is, they are complex.

Self-Social Power Relations

Comparisons among self and others has been assumed to be the basis of self definition. If the search for self definition is sufficiently intense and extensive, a comparison is required of self and others in terms of some ordering with regard to a given dimension having an evaluative component. One of the significant dimensions of such comparisons is power.

The study of interpersonal relations with regard to power orientations is central to the personality theories of Adler (1927) and Horney (1937). Adler proposed that the "will to power" was more significant than sexuality in understanding interpersonal behavior. In his framework the striving for superiority and conquest was fundamental to security and the pleasure principle. Similarly, Horney includes the neurotic need for power for its own sake as one of the ten basic irrational solutions to disturbances in human relationships.

In a sense, the perception of the self as consistently superior or inferior to others may be interpreted as a dynamism; that is, as a search for an inviolable social position for the self (Horney, 1937). Horizontal status relations presents opportunities for exposure of the self to social criticism. Vertical relationships with others in which the self is either
subordinate or superior offers a patent structure to social relations and avoids the necessity of constantly comparing self and other; that is, a linear hierarchical ordering presents a simple structure of complex social interaction.

Simple structure may not be desired by everyone, however. Thus, for example, individuals with complex self concepts may be less threatened by exposure evolving from horizontal status relations. If the self concept is defined multidimensionally, threat to one aspect of a complex self concept need not threaten to collapse the total self structure.

In view of the primacy effect of parental relations and the family group as a microcosm of society in which the child rehearses in preparation for socialization within the community, the power orientation of the child in juxtaposition with the parental figures is presumed to be fundamental to the understanding of the power orientation with regard to generalized others. It is proposed that perception of the hierarchical ordering of self and a power figure such as the father, for example, will involve a power component as well as a component of equality at some level. The resulting relationship, therefore, may be represented as in Figure 1. The relative emphasis by individuals on either of these components is presumed to describe a generalized power orientation.

Self Esteem

Self esteem is but a special case of self-social power relations, but is retained as a component because of the relative significance of this aspect of power orientation. Self esteem concerns that facet of the self
concept wherein the individual attempts to evaluate the concept of self as he knows it or the salient aspects of the self as he selects them. This aspect of the self has attracted a large number of investigators (Wylie, 1951), but the results have been largely disappointing. Here it is proposed that the self concept is a mediating agent between the self system and social stimuli involving evaluation of the self by others. High self esteem is presumed to provide a lag in the response of the self-system. Evaluative stimuli from others of either a positive or negative nature do not evoke an immediate action by the individual receiver. The new information is examined in turn and although alterations in the self concept may emerge, the change process is gradual and guided by the existing self framework.

Low self esteem, on the other hand, provides no such buffer to evaluative responses. The receiver responds in direct correspondence with the stimulus information. Under these conditions, the self system is inclined toward oscillation or inconsistency. Thus, within the framework of the consistency theory of adjustment (Lecky, 1945), we have introduced the mediating mechanism of self esteem.

Previous investigators have assumed that acceptance of self and acceptance of others are associated (Berger, 1952; Fey, 1955; Phillips, 1951). This approach suggests that within some larger social context, the self and some generalized others are evaluated similarly. It is the nature of the generalized other, however, which may introduce wide variations in response. For the individual who accepts himself to a high degree, the generalized other may evolve from very different persons than those whom the less self accepting individual envisions. It is proposed here that self esteem is an
evaluation of the self in relation to significant others. A power orientation is implied. The perceiver orders himself in relation to significant others which may include a friend, mother, father, or the most successful person they know. These significant others provide a personal frame of reference within which the self is evaluated.

Centrality of the Self

Inner as opposed to outer orientation of the self has been a perennially controversial personality construct. A review of the literature in 1960 (Carrigan) indicates that the evidence concerning the correlations of the construct are equivocal and that the "status of intraversion-extraversion" as a dimension of personality remains somewhat tenuous. The definition of the intraversion-extraversion polar construct lacks clarity to the extent that identical responses on the Rorschach are interpreted in opposite ways by two different schools of thought (Klopfer, Ainsworth, & Klopfer, 1954; Piotrowski, 1957). In the present approach, the question of the inward-outward directionality of the self is operationally defined in terms of whether the individual defines the self in terms of "others" or defines others in terms of the self. Either the self or significant others may be perceived as the figure or ground. Cartwright (1961) has noted that therapy patients made more references to themselves in relation to others.

The centrality of the self, or the self as a point of reference in the social field, is presumed to be the basis of self consistency. The environment is constantly changing to some extent, the self remains a more stable point of reference in comparison with other as a point of reference.
Psychoanalytically oriented theories of personality propose that the introjection of the generalized other is the basis of social development as well as the development of a functional self concept. George Mead (1934) adopted this viewpoint but extended it to suggest the greater probability of stability and adjustment under conditions of multiple identification. Of particular concern is identification with parents. The parents serve as the first model of human behavior for the child. The expanded social milieu, however, presents an array of individuals who may serve as models. Multiple social stimuli threaten to be chaotic and the individual is compelled to categorize social stimuli according to personal criteria. These significant groupings provide the apperceptive mass with regard to evaluations of self and others. A rapidly expanding social universe as well as a changing self concept inveighs against self stability. The social objects with whom the individual identifies provides an abstract but constant other which serves as a point of reference both in communicating with others and the self. Presumably one or more of the parent figures will be included within the grouping of significant others with whom the self is identified. Omission of the parent figure from the self grouping suggests an inauspicious foundation with regard to social interactions and may represent a substantial probability of the generalization of this specific social omission to social situations in general.

In addition to considerations of the specific individuals with whom self is identified and indeed formulated, it is proposed that the relative number of identifications is a significant consideration in the description and understanding of personality, particularly in a social context. Assuming that
identification with others enables the individual to assume the role of the other (Mead, 1934), a wider spectrum of identification may be presumed to facilitate understanding and acceptance of others, which, in turn, is presumed to facilitate social interaction. In yet another sense, of course, this is merely a restatement of the theoretical formulation concerning the complexity of the self concept. Increased identification with others is presumed to be directly related to the complexity of the self concept.

There would appear to be, however, an optimal range of identification with others. An extremely limited identification with significant others may be associated with a purblind personality. An extremely narrow identification systems leads, perforce, to egocentricity and a perception of the self as separate, alone, different, and, perhaps, vulnerable. On the other hand, extremely inclusive groupings of self with others suggests an inability or unwillingness to discriminate self and others. Unwillingness to discriminate self and others may derive from a fear of self exposure and the subsequent comparisons of self and others on a variety of dimensions out of which the final groupings or identification system is derived. In essence we have now turned in full circle to the concept of individuation and self identity. Willingness to discriminate self and others is fundamental to the development of a clearly defined self concept.

Social Dependence

The underlying assumption in a variety of social psychological theories of personality is the conflict between the need for dependence and the need for independence (Rank, 1936; Ausubel, 1952; Levy, 1955; Harvey, Hunt and Schroder, 1961). Inherently, the socialization process involves conflict between the satisfaction of individual and the satisfaction of group needs.
More recently, Ziller (1964) has examined this conflict in terms of ego-identity and group identity.

Most personality theorists propose, in one form or another, that most children experience a period of dependent identification with their parents. In this stage the child is submissive to external control almost to the point where there exists a lack of differentiation between the parents and the self.

The second stage of development is usually described as independence (Levy, 1955) or "negative independence" (Harvey, Hunt & Schroder, 1961). Here is witnessed the growth of the "self will." Parental control is resisted.

Exclusive reliance upon external cues for behavior controls proves unreliable as the life space of the child is enlarged to include other individuals or to include the alone condition. With the enlargement of the social field, the absolutistic rules established with a single individual prove too rigid to operate effectively under a wide variety of situations. For example, behavior acceptable to parents is not acceptable to teachers or peers.

Reduced exclusive interaction with parents also demands and necessarily creates a more differentiated self concept. At this developmental stage, information concerning the consequences of personal behavior is frequently transmitted solely and directly to the individual rather than to the parent-child complex. Emerging from the dependent developmental period, the child begins to distinguish himself from other group members, is recognized by other members, and enables other members to distinguish or locate him among the members. Thus, in this period, the child begins to establish an identity as a separate, unique individual.
The process of socialization with reference to the parents is repeated in turn with peer groups and school authority groups. Integration with the other is followed by differentiation. The conflict between dependence and independence is a concommitant of socialization. The hypothesized resolution of the conflict is an ego identity and group identity duality.

Definition of the self in terms of others is a given. But definition of the self exclusively in terms of significant and powerful others may lead to ego diffusion. The self fuses with the other. Stability of the self definition and other definition may be achieved by a definition of the self in terms of others but apart from others. This duality preserves a degree of objectivity within self-other perception. Ego identity and group identity are proposed as the two primary foci around which the life space of the individual is described. These two foci act as points of reference for each other and as correcting or guidance mechanisms. Social stimuli may be viewed from either or both foci, thereby providing stereoscopic perception, if you will, of the self-social complex.

Throughout the discussion of the seven proposed components of the self it has been necessary to indicate points of overlap among the components. The component approach is inherently misleading in that it suggests a compartmentalization of the aspects of the self. Since the self concept is necessarily highly integrated, any attempt to describe facets of the concept is inherently contradictory. Any mechanical analogue of the self will introduce many misconceptions. Indeed, it must be apparent that there is little similarity between the model of the self as presented here and the self as the individual perceives it. The individual's abstraction of the self is scarcely fractionated as it is presented here. Moreover, the self concept is
rarely verbalized to any extent. A more primitive communication system of the self to the self is posited which can not be conceived apart from the emotions or rudimentary forms of abstraction which predate verbal communication systems. Thus, any method of analyzing the self concept of the individual must employ a psychological probe which avoids the requirement of asking the subject to manipulate sophisticated symbols which may have vastly different meaning for the observer and the subject. Although an holistic approach to self description has been proposed, components of self presentation were retained for purposes of analysis. In this manner it was hoped that an increased understanding of the self structure might evolve from analyses of these components, albeit in some nonsummative, heuristic sense.

THE SELF-SOCIAL SYMBOLS TASKS

In Kelly's monumental Psychology of Personal Constructs (1955, p. 9), it is suggested that the development of ways of making personal constructs and construction systems more communicable is a critical problem in clinical psychology. The approach proposed herein derives largely from the works of Kelly (1955), Kuethe (1962), and perhaps Osgood, Suci and Tannenbaum (1957). Essentially the psychometric techniques employed by Kelly and Kuethe evolve from a cognitive framework. These techniques assume, in general, that the human organism finds it expedient to order and categorize or to structure generally the multitude of stimuli impinging upon his sensory organs. The categories used are to some extent idiosyncratic, but owing to commonality among human experience, sensory processes, and classification systems, the categories which develop may derive from similar representational or abstracting processes. Some of these processes include
extent of separation between objects, number of objects in a category, means of separating categories, and similarities and differences between objects.

Consistent with the theoretical framework, the Self Social Symbols Tasks were developed on the basis of two principles: (a) the tasks require the subject to relate himself to the social environment; (b) the tasks be primarily non-verbal in character. The desirability of this latter requirement of measures of personality has been noted by Guilford (1959). Of course too, the increased utility of the instrument across language barriers is an additional advantage of the non-verbal or a minimally verbal approach to personality assessment. Attempts to utilize a nonverbal approach for the description of the self concept have been rare if not nonexistent. In a recent survey of the literature by Ruth Wylie (1961) no references to nonverbal approaches were noted.

In Kelly's approach to the measure of personal constructs, the similarities and differences among triads of persons in the individual's social space are studied through an analysis of constructs which the three persons have in common or constructs which differentiate the three persons. The persons in the triads may include father, mother, brother, an employer, wife or girl friend, liked teacher, and other salient persons in the subject's life space.

Aside from the difficulty of analysis, one of the major criticisms of the approach is stated by the originator of the technique (p. 23) in his sixth assumption concerning the ability of the examinee to communicate his personal constructs to the examiner. "This is the most precarious assumption. It involves believing that the words the subject uses in naming his constructs, and the explanations he gives, are adequate to give the examiner some practical understanding of how he is organizing the elements in the test."
Indeed, Kelly suggests the present approach when he writes that "A person is not necessarily articulate about the constructions he places upon his world. Some of his constructions are not symbolized by words; he can express them only in pantomime. Even the elements which are construed may have no verbal handles by which they can be manipulated and the person finds himself responding to them with speechless impulse. Thus, in studying the psychology of man-the-philosopher, he must take into account his subverbal patterns of representation and construction."

At the very least, the verbal ability of the subject must be considered in the interpretation of the results of any instrument requiring a degree of verbal facility, thereby necessarily complicating comparisons across subjects. A less heavily weighted verbal component in the expression of personal constructs or schemata as sought by Kelly may be possible through the arrangement of representational figures as suggested in Kuethe's studies (1962) but adapted for paper and pencil administration and employing some of the configurations described by Gardner, Jackson, and Messick (1960) in their analyses of cognitive styles.

In the work described by Gardner et al and by Kuethe, the subject's perception of objects as his personal constructs were assumed to be determined by the way in which he arranges these objects in relation to each other. Thus, consistent with Heider (1958), when a person indicates that two objects "belong together", it is assumed that he is employing a concept which relates these particular two objects. In Kuethe's descriptive studies, subjects placed sets of figures cut from felt on a felt board under conditions of free response. For example, there was a tendency for subjects to place a child nearer to a woman than to a man; and a tendency to place a dog next to a man rather than next to a woman.
In these studies, the orientation of the self with the social objects was only implied as a projection. It was assumed that the subject identified with the male or female figure; a social object representing the self was not included for arrangement. Moreover, only a limited number of arrangements and metrics were explored, distance between objects and separation of objects. Finally, the use of actual figures of persons imposed a severe limitation upon the score of the device.

The work of Gardner, Jackson and Messick (1960), suggests one other arrangement of social objects, grouping. For example, a subject may be presented with a heterogeneous collection of objects (usually material rather than social objects) and asked to "group them in any way that you wish." The approach derives from a concept formation framework as it applies to categorization behavior. Thus, the tendency to use a few as opposed to many subgroups has been demonstrated to be a stable cognitive style.

The confluence of the approaches is apparent. By asking subjects to group an array of social objects or to relate themselves to a variety of significant social configurations, a non-verbal method emerges for communicating self and social constructs. Still, strict adherence to a completely non-verbal or limited verbal approach to the measurement of the self concept is an undesirable restriction itself. Thus, in measuring the complexity of the self concept it was deemed necessary to use the verbal resources of the subject, although to a limited extent. Examples of the items included in the SSST are presented in the Appendix.
Self Esteem

An index of self esteem was derived from item 1. The measure presented a horizontal array of circles and a list of significant others (doctor, father, friend, the person with whom you are most happy, mother, yourself, the most successful person you know, and the person with whom you are most uncomfortable). The task requires the subject to assign each person to a circle. The score is the weighted position of the self. In accordance with the cultural norm, positions to the left are associated with higher scores.

The tendency to place more highly favored objects in the position toward the left in a horizontal display has been noted by Morgan (1944). The construct validity of the approach was supported in previous research (Ziller, Megas & De Cencio, 1964). Electroconvulsive shock therapy patients selected for this extreme treatment because of extreme depression, in comparison with other neuropsychiatric patients tended to place themselves last in an assumed left-right hierarchical ordering of the symbolic circles. It was also found (Henderson, Long & Ziller, 1965) that children placed the "smartest child in the class" to the left and a "bad" child to the right to a significant degree. A sample of 48 children also placed the self significantly further left among a group of peers than among a group of adults.

Power

In harmony with the findings of Osgood et al (1957) with regard to potency judgments, and with the cultural metaphor which associates power with a "high" position, subjects in the two power items of the Self-Social Symbols Tasks were given a choice for the placement of a significant other
person (father or teacher) which permitted the other person to be placed (a) directly above the self, (b) diagonally above, (c) horizontal with the self, (d) diagonally below, or (e) directly below the self (see item 2). The responses were scored from one to five with a higher score associated with a higher position. Evidence in support of the validity of this kind of measure was found in preliminary research in which three separate samples of eighth grade students placed teacher significantly higher than they placed friend in relation to self on two separate items.

**Centrality**

In the three tasks designed to measure centrality of the self, the child was required to draw circles representing both himself and a particular other person (friend, mother, teacher) within a large circular area (see item 3). The center of the large circular area was assumed to act as the point of reference for the entire field. The location of the self rather than the other in a more central position was presumed to depict symbolically a focal position for the self. The construct validity of items of this kind was supported in an earlier experiment (Ziller & Grossman, 1966) in which it was found that acute neuropsychiatric patients in comparison with normals placed themselves rather than others more centrally.

**Identification**

Two types of tasks were designed to measure identification. The first was a grouping task in which the subject was required to arrange circles representing yourself, mother, father, friend, doctor, teacher, person with whom you are most uncomfortable, person with whom you are most happy, and most successful person you know, into as few or as many groups as he wished. (See item 4.) The score was the number of social objects included in the
self-category. Identification and grouping or proximity were assumed to be equivalent.

Previous research with regard to items like task 4 (Ziller, Megas & De Cencio, 1964) demonstrated that normals included more social objects in the self category than acute neuropsychiatric patients.

The second type of task designed to measure identification presented a row of ten circles. The first circle on the left represented the self. In three separate items the child was asked to locate a friend, father, and mother respectively in one of the other nine circles. (See task 5.) Distance in terms of number of circles separating self and significant other was presumed to be a measure of identification.

Majority Identification

Three items similar to task 6 were designed to provide a measure of majority identification. Choice of the self referrent object as similar to the majority of objects in the field was coded as a unit of this self-other concept. In two items the majority comprised 80% of the social field, and in the other item the majority comprised 100% of the social field.

Evidence for the validity of the concept was found in a pilot study of 27 pairs of twins. The twins chose an object representing the minority to represent the self more frequently than a control group of non-twins matched for sex, age, and class in school (p < .05).

Social Dependence

Task 7 was designed to measure social dependence. Location of a circle representing the self within rather than without an imaginary societal triangle with apexes representing parents, friends, teacher was presumed to be related to social dependence. This assumption was supported by a finding.
that children placing themselves outside the group preferred to participate in more activities alone as opposed to with a group than did those placing the self within the group (Long, Ziller, Henderson, 1966).

Task 8 provided a measure of the complexity of the self concept. One hundred ten high frequency adjectives selected from the Thorndike-Lorge Word Book (1944) were presented in an adjective check list form. The directions read to the children were "Here is a list of words. You are to read the words quickly and check each one that you think describes YOU. You may check as many or as few words as you like--but be HONEST. Don't check words that tell what kind of person you should be. Check words that tell what kind of a person you really are."

As part of an unpublished research program by Alex Bavelas to which we have already referred, the correlation between ratings of the complexity of a written message and the number of words used in the message was .95. On the basis of these results, it was assumed that the complexity of the self concept may be measured by noting the number of words checked in an adjective check list with self as the reference. Additional support for the proposed association between complexity and number of descriptive adjectives was found in a recent report by Glanzer and Clark (1963). A correlation of .88 was reported between the complexity of a variety of figures as rated by judges and the number of words used to describe these figures by another group of subjects.

The self-social constructs theory of personality and the evolving topological measures appear to stem from the phenomenological tradition. The approach is presumed to facilitate revelation of the subject's private world as he see it. The approach also minimizes a language factor which, itself,
may limit the subjectivity of the report since language imposes a categorization system which necessarily, through abstraction, involves a distortion of the subject's perception. Finally, the subject's perception or reports of his perception of the tasks are not distorted by attempts to meet the expectations of the observer since the observer's expectations in the self-social symbols tasks are difficult to divine. Yet within the subjective framework objectivity is preserved. The tasks presented to the subjects are uniform (although only from the point of view of the experimenter), and the experimenter infers the underlying construct. Thus, in Brewster Smith's (1950) terms, the present approach involves concepts which are "subjective constructs." The life space of the subject is not immediately given in the concreteness of experience. It remains for the psychologist-observer to account for the individual's behavior through inference.

The internal consistency of each of the self-social constructs was examined with a random selection of 75 subjects from the eighth grade of a public Junior High School. The intercorrelation of the three items ranged from .36 to .65 (p < .01 in all cases). Therefore, in the analysis of the results the sum of the scores in the three items comprised the individuation index.

A correlational analyses of the two power items revealed that the measures with regard to the two focal others (father, teacher) were relatively independent. Therefore, these items were analyzed separately.

The correlation coefficients among the three items concerning centrality were .12 (n.s.), .34 (p < .01) and .44 (p < .01). On the basis of these results, the individual scores as well as the total were used.
The intercorrelations of the three identification items like task 5 ranged from $r=.23$ to $.61$ ($p < .05$). As a result, a total score was used. Items 16 and 20 which concern mother and father were also combined on the basis of the high correlation coefficient (.61) and the obvious common parent reference.

The number of objects included in the self category (item 4) was not found to be related to the other measures of identification.

As a result of the preceding analysis, 15 measures of self-social constructs were selected and interrelated. These measures included: (a) self esteem, (b) complexity, (c) two indices of power, (d) four measures of centrality, (e) five measures of identification, (f) a measure of majority identification, and (g) a measure of societal dependence. The results indicated in general, that the measures were relatively independent with some notable exceptions. Lower self esteem was associated with choice of a circle to represent the self which was similar to the majority.

A correlational analysis was conducted between the selected 15 measures of Self-Social Constructs and the California Mental Maturity test. The subjects were 100 eighth grade students, both boys and girls.

Five of the 15 correlation coefficients were statistically significant. All correlations were low, indicating that intelligence is not a major component of the Self-Social Symbols Tasks. It was of interest to note, however, that majority identification and intelligence were found to be negatively correlated ($r = -.15, -.25, -.21$, $p < .05$ only for the latter two). These results indicate that the less intelligent student chose a symbol to represent the self which was different than the majority or simply different. Further exploration of the results and the individual students who chose the
different symbol suggested that these were largely students who were in the lowest academic grouping (the eighth grade class had been divided into nine homogeneous academic groupings according to intelligence, achievement, and the counsellor's judgment of the students academic ability). Thus, the results may indicate that low academic ability is a stigma which is reflected in the child's self concept; that is, he perceives himself as different.

In addition, it was noted that on two items which required the subjects to locate the self in relation to the family or members of the family, the less intelligent student located the self in a position more distant from "family" and from "father" \( r = - .20; r = - .20; \) \( p < .05 \). In keeping with the previous results, these results also suggest that the less intelligent child is not as well accepted by his parents because the child reflects a less positive image of themselves. Thus, the child is less able to identify with his less accepting parents.

Although the SSST is assumed to be a low visibility approach to the measure of various self-other constructs, the relationship between the SSST approach and self reports was examined (Ridgeway, 1965). For example, with regard to self esteem, the self report question required the respondent to indicate on an eleven point scale how she would evaluate herself in relation to other persons. With reference to complexity, the subject was asked to describe herself on an eleven point scale concerning how complex she was, how difficult it would be to describe herself, and how intricate and elaborate a description of herself would be required in order to be fairly accurate. The subjects were 150 girls enrolled in an introductory psychology class at the University of Maryland. Three of the correlation coefficients were statistically significant at the .05 level of confidence or better, complexity
(r=.34), majority identification (r=.40), and centrality (r=.20). Curiously self esteem was negatively related to the self report although not significantly (r= -.08). Thus, there is some correspondence between the SSST responses and the self reports. The position is taken here that the subjective constructs of the SSST which require inference for interpretation is a more promising approach than self reports.
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STUDY I

SELF-SOCIAL CONSTRUCTS AND SOCIAL DESIRABILITY

Robert C. Ziller, Marea Alexander, and Barbara H. Long

Having outlined the theory of self-social constructs and having described the instrument which has been designed to measure various components of the framework, we will describe a field study which utilizes both the theory and the measures of self-social constructs in examining the personality structure of socially desirable and less socially desirable children.

The personality determinants of individual popularity were reviewed by Mann (1959) who found that extraversion, adjustment, and conservatism were related to popularity. Little by way of interpretation was proffered, however.

Several reviews of the literature concerning acceptance of self and acceptance by others report that persons high on self acceptance tend to be accepted by others. In one of the reported studies, Coopersmith (1959) found that fourth, fifth, and sixth graders showed a significant positive correlation (.34) between self esteem and popularity. These results are usually interpreted as supporting Rogers' (1951) expectations that "...the person who accepts himself will, because of this self-acceptance, have better interpersonal relations with others" (p. 520).

A number of shortcomings of previous research may be listed. Variations in subjects, situations, and instruments render comparison among studies difficult. Most of the studies assume that self acceptance is a unidimensional perceptual property. All use measures of self esteem with a high verbal component. Most seriously, however, there are few attempts to postulate a rationale of self acceptance and as it relates to acceptance by others. Even
Roger's statement quoted above is largely tautological.

Kelly has proposed (p. 131) that much of a person's "social life is controlled by the comparisons he has come to see between himself and others." In the present study, this social psychological theory of personality is expanded to include a variety of comparisons between self and others. It is proposed that the individual's perception of early group experiences are abstracted in terms of a topological mapping of self-others rather than in terms of verbal abstractions; and that these topological representations of self and others is enduring. Indeed, the self-other representations provide a framework which projects itself to social relationships in such a way as to preserve the original self-other structure. The structure may also be preserved by selecting social experiences which are consistent with the incipient self-other framework. In this way, social experiences are in a sense predictable from perceptions of past social experiences as mediated by self-other topological abstractions.

It is proposed here that perceived family social constellations with the self as a point of reference are propaedeutic to extended family and, subsequently, non familial social relationships. The nature of these social constellations may be described in terms of the self-social components described earlier.

It is assumed that popularity is the maximal matching or accommodation of the characteristics of self and other. Essentially, it is proposed that the more popular or highly chosen individual is capable of presenting a facet of the self acceptable to the widest variety of others. In general, it is proposed that the following self-social constructs are related to social desirability: (a) majority identification, (b) complexity, (c) perception of
horizontal self-social power relations, (d) non-centrality of self, and (f) multiple identification. Interpretations concerning the frequently established relationship between self esteem and acceptance by others were found to be equivocal at best.

Examining each of the other proposed self-other components on the basis of the optimal matching postulate, it was proposed that majority identification and acceptance by others are positively related. This proposition evolves rather directly from the theoretical considerations of the majority identification construct. It is proposed that majority identification is associated with a tendency toward the perception of others as similar to the self, belongingness, expanding social relations, and a degree of dependence upon others. These mediating social proclivities are presumed to be related to reciprocal behavior by the other and to result in high social acceptance. No causal relationship is implied.

It is also proposed that complexity of the self concept and social desirability are positively related. Simply on a probability basis, the multifaceted self possesses a higher matching potential and, therefore, a higher sociometric rating potential.

Maximum matching with self and other may also be facilitated by relatively lower power orientation between self and other as well as through the perception of other as the point of comparison rather than the self. As was proposed at the outset, power orientation with regard to others may be interpreted as a dynamism related to dogmatism. A status relationship between self and other provides a ready and relatively reliable decision making device which circumvents protracted self-other qualifications. Through this device the self is not exposed repeatedly to the necessity of redefinition.
At the same time, however, information search is inhibited. (Long & Ziller, 1964.) Thus, information search for a basis of social matching is inhibited.

Perhaps, in a sense, power orientation is but one aspect of centrality of the self. Perception of self-other relationships in terms of a power dimension, (whether the relationship be one of superiority, subordination or even equality) is presumed to reflect a dominant self concern; a perception of other in terms of the self rather than the self in terms of other. It also suggests a more rigid self definition. The self being relatively constant is inherently less flexible in its definition than other. Thus, the self centered individual is more inclined to select others who are congruent with the self definition. A more narrow range of choice of others follows. Finally, unrestricted selection of the other in terms of a restricted self definition reduces the probability of broad acceptability by others.

With regard to identification, it is proposed that the ability to identify with a wide variety of others facilitates mutuality and, therefore, facilitates social desirability. Again, the argument is similar to that concerning complexity of the self concept. Of particular interest here, however, is identification with the parents. Inclusion of the parent figures within the self definition or as self referrents is presumed to be an important although not a necessary factor in sociability.

All personality theorists who are concerned with the self construct view the parent-child relationship as critical in the development of the self concept. As summarized by Wylie (1961), the logic of this preceding statement follows from these general principles: (a) The self concept is learned. (b) An important part of this learning is others' reactions to the self. (c) Parental reinforcement has a primacy effect and a frequency effect. Presumably then, the parents can influence the child's perception of
the acceptability of the self to others. Hence, identification with the parent is presumed to indicate a successful social relationship with the parent figures which serves as a model for social relations in general.

It should be noted that the preceding hypotheses do not assume or suggest that acceptance by others is tantamount to adjustment. Indeed, one of the virtues of the self-social constructs framework is that the patterns of self-other relations eschews an evaluative connotation such as good-bad or adjusted-maladjusted.

**Subjects**

The subjects were 321 sixth grade students in eleven classrooms from four schools. The subjects were all white. The composition of the classes remained unchanged throughout the school day.

**Procedure**

All subjects completed a sociometric item asking them to name the five children with whom they would most like to play. Those children who were not chosen by anyone were, of course, designated as the least popular. A number of popular or most highly chosen subjects equal to those of the unchosen were selected from the same class. The resulting sample was reduced to 50 by random selection in order to match the socially desirable sixth graders (17 boys and 8 girls). These 50 children were then administered the Self-Social Symbols Tasks by groups according to classroom designation. The directions for each item were read to the subjects in order to minimize any verbal component of the responses.

**RESULTS**

The hypothesis relating majority identification and social desirability was not supported by the results. (See table 1.)

*Insert Table 1 about here*
The hypothesized association between complexity and social desirability was supported by the results to an astonishing extent. The unchosen children checked the least number of adjectives. (Mdn. (U) = 24, Mdn. (Popular) = 41). Indeed, using a cutoff score of 31 adjectives, 49 out of 50 subjects would have been categorized correctly as highly chosen or unchosen.

An analysis of the frequency with which adjectives with self depreciating associations were checked by the two groups of subjects was also explored. A list of negative self referrent adjectives was formed including only those adjectives upon which the three experimenters were unanimously agreed. Differences in the frequency of negative adjectives checked by the more and the less popular children did not approach an acceptable level of statistical significance.

It had also been proposed that power orientation with regard to significant others was negatively associated with social desirability. The data were partially supporting. In the item pertaining to the power relation of self and teacher, the popular members placed the teacher in the diagonal or horizontal position whereas the unchosen members placed the teacher in the vertical position with references to the self. (60% as opposed to 32%; $X^2 = 3.96$, $p < .05$). The results with regard to the items involving the power orientation of the self in relation to the father and friend (items 6 and 13) were not statistically significant and indicated little which warrants comment.

The association between self esteem and social desirability was also explored. The results support the frequently established finding that self esteem and acceptance by others are positively related. ($X$ (popular) = 3.8; $X$ (unchosen) = 5.7; $= 3.87$, $p < .005$).
It may be recalled that measures of centrality were derived from three tasks using friend, mother, or teacher as comparison persons. With regard to the arrangement of self and friend, the hypothesized negative relationship between centrality and acceptance by others was supported. Thirty-three percent of the popular subjects placed self centrally as opposed to 83% of the less popular. ($X^2 = 12.40; p < .005$.) The results with regard to "mother" as the alter-object were not statistically significant. The results with regard to "teacher," however, were statistically significant but were in the opposite direction of the previous results. The most popular students tended to locate the self more centrally than the less popular students when the paired social object was the teacher. (68% versus 35%; $X^2 = 5.68; p < .05$.)

The results with regard to identification were not statistically significant. It will be recalled that the Self Social Theory outlined at the outset was largely concerned with the child's identification with the parents. One of the identification items asked the subject to group self and significant others including mother and father. The location of the mother or father symbol on either side of the self was assumed to be an indication of parental identification. The resulting chi-square test was statistically significant. The more popular children were found to identify more with their parents, that is, located the mother or father in the proximal position more frequently (72% versus 33%; $X^2 = 8.19, p < .005$).

Finally, the results revealed that the less popular children located the self more frequently inside the imaginary triangular area (40% versus 64%; $X^2 = 2.88, p < .10$). However, since these results were derived from a dichotomized criteria, some statistical power is lost. In a second approach to measuring the relationship between self and the triangular representation of
salient interrelated subgroups of which the individual is a member, distances in centimeters between self and each of the three subgroups was measured separately and analyzed with regard to high and low popularity. The results were statistically significant (p < .05) with regard to both friends (X = 4.4 cm. versus 2.7 cm.; t = 2.20) and teachers (X = 3.2 cm. versus 2.1 cm.; t = 2.25) but not with reference to parents. In the two statistically significant results, the less popular children located the self closer to friends and teachers.

DISCUSSION

The more socially desirable child was found to display higher self esteem, greater complexity of the self concept, a more egalitarian orientation with at least one significant high status other (teacher), less self centeredness with regard to friends but more self centeredness with regard to a high status other (teacher), and greater identification with parents.

In addition, it was found that more popular sixth grade students located the self farther from teacher and friends in the teachers-friends-parents triangular set of subgroups. Since these results with regard to the subgroups of the triangular configuration can not be interpreted apart from the figure as a whole, it would appear that more popular children locate the self away from or outside of the social field dominated by superiors. It is proposed that the field near the triangle may permit less expression of individuality; behavior within this area is defined in relation to the well defined superior dominated social matrix. Outside the triangular social field, individual expression is permitted greater latitude. Thus, it is suggested that popular children are more independent of the senior social structure than less popular children.
The only results which did not support the hypothesized status relationships were those with regard to self-teacher centrality. The more highly chosen children placed themselves more centrally in relation to the teacher. It would appear, however, that the data with regard to self-teacher centrality may be more meaningfully interpreted with reference to self-teacher power orientation. With this restructuring, the results with regard to self-teacher centrality are consistent with those already cited indicating that the highly chosen children present a qualified power orientation with high status others. The highly chosen child's power relationship between self and others derives from something more than simple above-below, large-small, superior-subordinate polar comparisons. The relationship between self and others is defined in a more complex manner. Thus, complexity emerges as a pervasive component of the theoretical system, and a restructuring of the theoretical system is suggested.

In summarizing earlier research concerning the personality characteristics relative to sociometric status, Gronlund (1959) noted that characteristics such as kindness, cooperativeness, generosity, loyalty, agreeableness, sincerity, helpfulness, considerateness, and friendliness are frequently mentioned. He concluded that the pupil with the high sociometric status is the one who is perceived by the largest number of others as possessing need-satisfying personality characteristics.

Kelly and Thibaut (1959) formulate a bargaining model of social interaction. The relative costs and rewards of interaction with a given person determine the sociometric choice or status. It is proposed that the individual who affords the greatest rewards at the least cost is the most highly selected individual.
At the outset of the present study, sociometric status was interpreted as maximizing matching among a group of individuals. Maximizing matching was presumed to be achieved through minimizing power orientations, a stable self definition, high complexity of the self concept, and ability to identify with a wide spectrum of others. The argument was of a statistical nature; noncentrality of self and a qualified power orientation, for example, were assumed to aid in avoiding a deviant position, thereby maximizing matches with the largest possible number of others who occupy the mean positions of an assumed normal curve of personality characteristics. The results of the study would appear to support this position. Yet, the results of the present study along with those of earlier studies already reviewed now suggest a two level theory of personality within a developmental framework. The two level self-social constructs theory places greater emphasis upon an assumed developmental sequence and the complexity of the self concept.

The theory assumes a three step social developmental sequence (a) founded upon parental acceptance; (b) leading to self definition, self acceptance, and acceptance of others as an interactional process; (c) which in turn is reflected in acceptancy by others. Evolving from this socialization process, there emerges a more complex self concept, a transcendental personality operant which is a postulated consideration in all of the proposed self concept components including power orientation, self esteem, identification, central- ity, and individuation.

In greater detail, the two level theory of socialization focuses upon the family as a microcosm of society. The family provides a model of social behavior and a stage for rehearsal and development of the self concept. Imitation and identification with the parents are associated processes. In-
indeed, the child tends to perceive parent and self as one. Emerging from this period of dependence, the child advances into a period of independence or de-satellization (Ausubel, 1952). The self now becomes defined not only in terms of the relationship with the parents, but also in relation to significant extrafamilial others.

Movement from the stage of near complete identification with the parents to a more inclusive social complex may be retarded in at least one of two ways, either of which may be associated with retardation in self-other differentiation. It is proposed that if the child is either rejected or overly indulged by the parent group, the development of the child's self concept, in terms of complexity, is arrested. For example, nonacceptance by parents is presumed to engender anxiety followed by a concerted effort to regain parental approval. In the process of this silent, internal struggle, the impetus in the socialization process is lost. Energies which should be garnered to cope with more advanced developmental problems are diverted in an effort to establish primary social relationships already achieved by the large percentage of other children.

Similarly, it is proposed that retardation in any one of the three postulated phases of the socialization process in terms of the self tends to have implications for a more narrowly defined self concept. Anxieties concerning self-other relations are assumed to be associated with centrality of the self and, conjointly, reduced ability or inclination to identify with others. A more narrowly defined or less complex self concept tends to emerge.

Thus, a two level theory of personality emerges. At the first level four components of the self concept are postulated: (a) individuation, (b) power, (c) centrality, and (d) identification. At the second level of
abstraction it is proposed that development of each of the foregoing compon-
ents is associated with increased complexity of the self concept. A comparison
of the self with a multitude of others gives rise to a distinct self definition,
a highly differentiated or individuated self. The perception of the self with
regard to others along a multitude of dimensions enables the individual to
avoid comparison along a single dimension such as power. Cathexis toward
others avoids narrowing influences of self concern and centrality. Similarly,
multiple identifications with others facilitates a complex self concept by
providing a multiplicity of models for the self.

This view of the self is multifaceted to the extent, perhaps, that the
possible interrelationships and interactions among the facets of the self
defy complete analysis. Yet, within the complexities of these interrelation-
ships exists the basis of stability. New information relevant to the self is
readily assimilated into the complex framework. Persons with a complex self
concept have recourse to new relationships between self components which may
facilitate acceptance of new information concerning the self. Simple struc-
ture is not demanded. Qualifications of self perceptions are constantly recog-
nized; that is, a more complex self concept is more open.

To repeat, openness is preserved within a framework of stability. As pro-
posed in the theory of self-social constructs, high self esteem provides a
mediating mechanism which enables the person to delay response to evaluative
information concerning the self. In this hiatus, the information is examined
relative to the existing self system. Where modifications in the self system
are indicated, a change process is possible but not with any accompanying
threats to the stability of the system. That is, high self esteem insures
stability and predictability. Thus, it is proposed that stability and pre-
dictability within a framework of complexity is associated with an increased probability of acceptance by others.
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STUDY II
GEOGRAPHIC MOBILITY

Robert C. Ziller and Barbara H. Long

Geographic mobility is an ubiquitous feature of modern American society, characteristic of certain segments of all social classes (Hollingshead and Redlick, 1954). Speculation about the psychological effects of spatial mobility has largely centered upon an assumed social isolation of the mobile person and the possible relationship of this isolation to mental disorders. The results of studies of such effects, however, have been equivocal and contradictory. Thus, Tietze, Lemkou, and Cooper (1942) examined the records of 1022 patients in Baltimore for rates of various psychoses in relation to mobility. The highest prevalence of mental disorders occurred among people living for the shortest time in the same house. Robins and O'Neal (1958), locating adults who had been problem children 30 years earlier in St. Louis, discovered a high incidence of both social problems and mobility. Hollingshead and Redlick (1953), on the other hand, found no significant relationship between psychotic disorders and geographic mobility, nor did Schmitt (1958) in his study of area mobility and mental health in Hawaii. Gabower (1959) likewise was unable to establish the negative effects of mobility in her study of children with behavior problems.

In the present study the association is analyzed between spatial mobility and various components of the self concept without assuming a negative or positive relationship between spatial mobility and personality as a whole.

The child who moves frequently and who anticipates frequent geographic changes faces the prospect of a constantly changing social environment. If the self is defined primarily in terms of others, and others are constantly
changing, the perception of self may be presumed to lack stability. A degree of consistency might be achieved, however, if self is taken as the point of reference regarding others, since the self is more constant than others from one geographic location to another. It is therefore proposed that the child who has moved frequently tends to perceive the self, rather than others, as central.

It was also hypothesized that high mobility children tend to identify with the majority to a lesser degree. The mobile child repeatedly finds himself dissociated, outside, or separated from groups of others. He does not belong. The groups of others, by remaining separate, limit socialization opportunities for the newcomer. Of particular concern are the limited opportunities for consensual validation or the search for social reality. The mobile child's reference group is more remote and his views of the environment are not as readily referenced with regard to his peers.

The mobile child is not without recourse, however. In the search for social reality a stable reference group is required. It is proposed that the stable reference groups most available to the mobile child are the ubiquitous parents and teachers. Although in a sense these reference sources are more remote, they provide the required foci for the establishment of social reality and self identity. However, identity thus achieved is accompanied by the cost of social dependence. When peers or groups of peers provide the frame of reference, the child is in a position to select those who will form the reference region. Less freedom of choice exists for the mobile child who is constrained to turn to the more stable adult world which includes, primarily, parents and teachers. Thus, it is hypothesized that high mobility children are more socially dependent.
The effect of spacial mobility upon the remaining components—identification, power, esteem, and complexity—are unclear, and indeed, there appears to be no ready rationale for predicting differences on these dimensions. These components were included in the study for their heuristic value.

THE FIELD STUDY

Subjects.

Three groups of eighth grade students comprised the sample. Children of this age were selected because there was sufficient opportunity to have experienced multiple moves, and any possible effects of geographic mobility could have had adequate opportunity to accumulate and intensify. In addition, it was assumed that self-other relationships were of critical concern to children at this age.

Sample A, the group with the highest geographic mobility, was comprised of 83 students of both sexes from the Dover Air Base School, Dover, Delaware. These students were all children of air force personnel, and had lived in an average of 6.9 communities. They all lived on the Air Base, an extremely open community, where the usual tour of duty was three years. In addition, the children of Sample A not only had moved frequently, but also expected to continue moving, at least until the retirement of the father from the Air Force.

Sample B consisted of 76 students who had lived all of their lives in a single community. These students were selected from the communities of Milford and Harrington, Delaware, (populations according to the 1960 Census were 5,795 and 2,495 respectively) located about 15 miles from the Dover Air Base. In Harrington, approximately 50 per cent of the eighth graders met the low mobility criterion; in Milford, about 44 per cent.
Because the high mobility sample was confounded by the military nature of the community, a second control high mobility group was also studied—a third group of children who had moved several times, but whose fathers were civilians. Sample C was comprised of 60 children from Dover Junior High School, (Dover population in 1960 was 7,250) whose fathers were not in the Air Force, and who had lived in three or more communities. Although the geographic mobility of this group was not as high as might be desired for experimental purposes, this additional sample made it possible to control for geographic area; and comparisons with this second experimental group provided some information concerning the generality of the results involving the Air Force sample.

Instruments.

Self-other orientations were again derived from the Self-Social Symbols Tasks. The tasks were self-administering and were completed by the subjects while assembled in large groups. Approximately 40 minutes were required to complete the tasks. The sequence of tests was constant.

Self-other primacy.

In addition to the Self-Social Symbols Tasks, a task designed to provide a general measure of self versus other orientation was included. Each student was provided two unlined sheets of paper (8½ x 10) and was then allowed five minutes to write about themselves (on the first sheet) and about a friend (on the second); that is, only a total of five minutes writing time was permitted. The number of words used to describe the self and the number of words used to describe the friend comprised two separate scores from which it was possible to determine the relative amount of time directed toward self description as opposed to friend description.
The results in relation to geographic mobility are summarized in Table 1. Means for each of the three samples are shown, and statistical tests of the differences between Samples A and B, and between Samples C and B are reported. The results with regard to mobile (Air Force) and non-mobile comparisons (C vs. B) are mutually supporting (with the exception of power of father), although fewer significant differences were found in the latter comparisons. (See Table 1.) Since the Air Force sample provides a more extreme mobile or open group, only these results will be discussed in detail.

Insert Table 1 about here

The hypothesis relating centrality of self to geographic mobility was supported. Air Force children obtained a mean centrality score of .80 as compared to a score of .33 for the non-movers. (p < .001.)

The results with regard to the hypothesis relating majority identification and high geographic mobility were also supported by the results. Air Force children selected the different circle to represent themselves more frequently than the low mobility children (2.07 vs. 1.72, t = 2.02, p < .05).

The hypothesis with regard to mobility and social dependence was also supported by the results. A higher proportion of Air Force children than non-movers placed the self within the adult dominated triangular representation of society (59% versus 33%; p < .001).

With regard to self-other power orientations, only the results related to power of father revealed significant differences. The Air Force children, in contrast to both other groups, placed the father in a less powerful position with regard to self (p < .025).
The self-other primacy measure also differentiated the Air Force sample from the non-movers. The highly mobile group wrote significantly more words about their friend \((p < .05)\), and significantly fewer words about themselves \((p < .025)\) than did the children who had never moved.

As to complexity of the self concept, the highly mobile and non-mobile groups did not differ significantly with regard to number of adjectives checked. An item analysis revealed, however, that the mobile children checked the following adjectives significantly \((p < .05)\) more often: ashamed, big, careless, different, difficult, eager, idle, lazy, lonely, slow, strange, unusual. The non-mobile children checked the following adjectives significantly more often: funny, good, useful.

**DISCUSSION**

The hypothesis relating centrality of self with geographic mobility was supported by the data. It was initially proposed that under open group conditions where the social environment is constantly changing, the self, rather than others, evolves as a social point of reference. That self as a focal point may be associated with social isolation is implied by the finding in the previous study that sociometric isolates in the sixth grade placed self, rather than friend, more centrally than sociometric stars. Thus, while centrality of self may be a necessary dynamism under conditions of an ever-changing environment, yet this condition appears to foster a separation of self from others.

The highly mobile child in this study, as hypothesized, also represented himself as "different" significantly more often than did the children who had lived in only one community. In the initial theoretical framework reduced majority identification by the mobile child was presumed to have evolved from
repeated separation from peer group and the concommitant reduction of opportunities for consensual validation. In an earlier study (Henderson, Long and Ziller, 1964) a lower degree of majority identification was found to be significantly related to the choice of an "alone", rather than a "group" condition. Thus, the mobile child appears to be indicating perceptions of social isolation. This conclusion is supported by the findings derived from the adjective check list in which mobile children described themselves not only as "different", but also as "unusual", "lonely" and "strange".

The findings related to the measures of social dependence and self-other orientation may also be interpreted in terms of social isolation. A significantly higher proportion of the mobile as opposed to non-mobile children placed themselves within the triangular representation of societal structure. Thus, although the mobile child reveals high centrality of self and minority identification, at once they were more highly dependent upon a supporting social structure of other persons. Previous research indicated that poor readers in contrast to good readers and sociometric isolates in contrast to sociometric stars also place the self in the triangle of significant other people to a significant degree (Henderson et al, 1964; Ziller, Alexander and Long, 1964). These cumulative results suggest that placement of the self within the symbolic societal structure reflects a general anxiety concerning unstructured self-other relations.

A similar interpretation may be made with regard to the findings that more words are written by the mobile child about the friend and fewer about the self. For the child who moves frequently, establishing new relationships or friendships with others is an endless enterprise (see Gabower, 1959), since interpersonal relationships within open groups are necessarily short-lived and unreliable. The greater attention accorded to "friend" in this task may
thus reflect a general anxiety concerning self-social relationships.

On the other hand, the member of a more stable community may be less anxious concerning social relations since he may be less aware of the problem. Reliable social relations at some level of acceptance are inherent in more stable communities.

Returning to the findings concerning minority identification and social isolation, there remains a question as to whether or not extreme differentiation of self and others is not, in itself, one of the sources of the posited self-other anxiety. Consistent with the initial framework concerning self-other orientation and self identity, it is proposed that a gross categorization system with regard to self and others is available to the high mobility child: mover versus non-mover. Having categorized the self grossly with regard to the apparent variable of mobility, further distinctions are less necessary in the search for a self identity. Self is simply perceived as someone different. As a consequence of this oversimplification, the development of a self concept with regard to complexity may be arrested. Indeed, the same self definition arresting tendencies may develop with regard to any gross distinction of self and other such as race and religion.

Altogether then, the self-other orientations of the mobile child include low identification with the majority, centrality of self rather than other, and social dependence. In addition to these positive findings, however, it should be noted that no significant differences between mobile and non-mobile children were found on the measures of complexity, power, identification, or esteem. It must be emphasized that the results do not warrant an interpretation which imputes maladjustment to the mobile child. This study does suggest, however, that a particular life experience--high geographic mobility--
has produced a unique system of self-social constructs. The results of the study also demonstrate the predictive value of the theory and the heuristic utility of the measuring device.

SUMMARY

A self-social construct theory of personality including components of individuation, complexity, power, esteem, centrality, and identification was described, and the effects of geographic mobility upon self definition considered. The Self-Social Symbols Tasks (largely non-verbal measures of the above components) were utilized to test the effects of geographic mobility upon self and social constructs of 143 mobile and 76 non-mobile eighth grade students. Significant differences were found in regard to individuation, centrality, dependence, self-other orientations, and self-acceptance. It was concluded that high geographic mobility was associated with a general anxiety concerning self-other relationships.
REFERENCES


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**TABLE 1**

Means and tests of significance of scores from Self-Social Symbols Tasks among Mobile and Non-Mobile Children

<table>
<thead>
<tr>
<th>TEST</th>
<th>MEANS</th>
<th>TESTS OF SIGNIFICANCE</th>
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</thead>
<tbody>
<tr>
<td>1. Majority identification</td>
<td>2.07</td>
<td>2.03</td>
</tr>
<tr>
<td>2. Complexity</td>
<td>31.1</td>
<td>26.0</td>
</tr>
<tr>
<td>3. Power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. father</td>
<td>3.3</td>
<td>3.8</td>
</tr>
<tr>
<td>b. friend</td>
<td>3.3</td>
<td>3.6</td>
</tr>
<tr>
<td>c. teacher</td>
<td>4.0</td>
<td>4.1</td>
</tr>
<tr>
<td>4. Esteem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. horizontal</td>
<td>4.7</td>
<td>4.8</td>
</tr>
<tr>
<td>b. vertical</td>
<td>5.9</td>
<td>6.0</td>
</tr>
<tr>
<td>5. Centrality</td>
<td>.80</td>
<td>.50</td>
</tr>
<tr>
<td>6. Identification</td>
<td>3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>7. Social dependence</td>
<td>.59</td>
<td>.50</td>
</tr>
<tr>
<td>8. Self-other primacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. self</td>
<td>42.6</td>
<td>50.0</td>
</tr>
<tr>
<td>b. other</td>
<td>33.2</td>
<td>34.0</td>
</tr>
</tbody>
</table>
Instructions:

Each of the small circles within the large circle stands for other people. Choose any one of the three circles shown at the bottom of the page to stand for yourself. Copy that circle somewhere within the large circle.

Figure 1: Example of an item designed to measure individuation.
Instructions:
The circle below marked "S" stands for yourself. Place an F in one of the other circles to stand for your father.

Figure 2: Example of an item designed to measure power orientation.
Instructions:
The small circles shown below stand for your Parents, Teachers, and Friends. Draw a circle to stand for yourself and place it anywhere within the large circle below.

Figure 3: An item from the Self-Social Symbols Tasks designed to measure dependency upon social structure.
STUDY III
DEVELOPMENTAL CHANGES IN THE SELF CONCEPTS OF ADOLESCENTS
Barbara H. Long, R. C. Ziller, and E. H. Henderson

The adolescent years may be described as that age period during which the child is in the process of making a transition from his biologically assigned familial group (the donor group) to his chosen family-community group (the host group). In this period of transition the adolescent is a member of a temporary group of peers. In a sense then, the adolescent is an imminent newcomer in an open social system in which the membership is constantly changing (Ziller, 1965). Identification with the members of the donor group are not as clear or close as they formerly were, but the imminent, alternate group of his own choosing is not yet outlined or may not even be envisioned. On a similar basis, Lewin (1936) has described the adolescent as a marginal man, and Erikson (1959) refers to the adolescent's problems of ego identity (stemming perhaps in part from the loss of group identity) as ego diffusion.

It is now proposed that since the adolescent's social field is changing, his self-social constructs also undergo restructuring. Social structures change in accordance with changes in relation to significant others such as father, mother, friends, teachers, and employers. For example, as a concomitant of the changing social field and extended opportunities for self-other comparisons, it may be anticipated that the self esteem of the adolescent is subject to change. According to Sullivan (1953) "self-system" has its origins in interpersonal relationships and it is influenced by "reflected appraisals." The individual's self appraisal will correspond to the appraisal by significant others such as parents and teachers and, later, peers. If, then, the social field changes, changes in the self system may be anticipated.
Studies of the self-concept during adolescence have been numerous. Both Strong (1957) and Jersild (1952), for example, collected and analyzed self-descriptions from large samples of adolescents. Other studies have related the self-concept during this period to delinquency (Reckless, Dimitz and Kay, 1957), physical maturity (Mussen and Jones, 1957), school achievement (Shaw, Edson and Bell, 1960) and to ethnic and socioeconomic background (Rosenberg, 1965). One common limitation of these studies is that the measures of the self-concept are either global or verbal. While it is of interest to have estimates of some overall rating; such as "self-evaluation," the self concept appears to be more differentiated, and a more molecular approach at this stage of the investigation may lead to greater understanding of the developmental process (Wylie, 1961). Moreover, verbal measures are highly susceptible to the effects of social desirability, verbal ability and fluency, and conscious manipulation.

In the present approach the Self-Social Symbols Tasks provided the dependent measures. Topological representation of the self concept not only minimizes the effects of verbal ability, but also has heuristic value.

Revisions of the Self-Social Symbols Tasks

For the present study and the subsequent cross-cultural study a longer form of the Self-Social Symbols Tasks was developed. The number of items designed to measure self esteem was increased to six. In each item six circles were presented in a horizontal array and the subject was required to locate symbols of six significant persons including the self within the circles. The score was the sum of the weighted positions for the self across items.

The power items were extended to five, including relationships with father, mother, teacher, doctor, and policeman.
The centrality items were extended to six. In each case the child was asked to locate the self and friend within a large circular field. The item was repeated six times throughout the test booklet.

The identification items were extended to eight. A significant person including mother, father, teacher, and friend was located at the extreme left of a horizontal series of ten circles and again at the extreme right of another horizontal series of ten circles. The distance in circles separating the self and the significant other constituted the measure of identification. In contrast to the earlier items, the position of the significant other was confounded.

Majority identification items were increased to eleven. The number of shaded circles in an array of ten varied from 0% to 100% in intervals of 10. Majority identification for each item was inferred when the subject chose a circle to represent the self which was the same as the majority. In some cases the majority was an unmarked circle and in others it was a shaded circle. In contrast to the earlier form, this series of items controls for the characteristics of the majority objects.

The social dependence items were also increased in number to six. In each item the same subgroups of significant others were used as groups of reference; that is, parents, teachers, friends. In some of the items, however, the imaginary triangle described by these subgroups was moved to the opposite end of the page and in other cases the positions of the subgroups were rearranged, but the size and shape of the triangle remained constant. Again, these rearrangements served to confound relationships of self and given subgroups.

The identification item involving grouping of significant others including the self was increased by three by varying the nature of the significant other in each case. In each item, however, "father", "mother" and "yourself" were always included.
The split half reliability of the subtests was calculated with regard to 81 high achieving fifth grade students in Quarry Hill Elementary School, Yardley, Pennsylvania. The results were Self Esteem = .84, Complexity = .68, Power = .07, Centrality = .65, Identification (mother) = .94 (tetrachoric), Identification (father) = .85, Identification (teacher) = .83, Identification (friend) = .78, Majority Identification = .86, Social Dependence = .92, Identification (the grouping task) = .86, Identification (inclusion of parents in the self group) = .85.

Intercorrelations of all 12 measures were calculated with a sample of five boys and five girls from each grade, 70 subjects in all. The 12 measures were found to be independent with the following exceptions: (a) identification with father, mother, teacher, and friend were positively related (+ .26 to + .43); (b) higher dependence was related to greater identification with friend (+ .38); (c) greater identification with mother was related to higher self esteem (+ .30); (d) greater power of self was related to less identification with teacher (- .29).

Subjects

In the present study, the Self-Social Symbols Tasks were administered to 420 students (30 boys and 30 girls of normative age for grade in each grade, 6 to 12) in four schools in Queen Anne's County, Maryland. The subjects were white, varied widely in socioeconomic class and academic ability and achievement, and lived in a rural area on the Eastern Shore of Maryland.

RESULTS

Analyses of variance in relation to grade and sex were calculated for each measure on the test, with the exception of identification with particular others. Here distributions were not normal and non-parametric statistics were employed.
Significant effects for grade or sex were found for the following measures: self esteem, dependency, three of the power items, and all five identification measures. Self-esteem increased with grade level ($p < .05$), continuing a trend found in elementary schools (Long, Henderson and Ziller, 1965).

Dependency, again continuing a trend, increased until the ninth grade, declining thereafter ($p < .01$). The sex by grade interaction for dependency was also significant ($p < .05$). Girls as compared with boys had lower scores in grades 6 and 7, but higher scores in grades 10, 11, and 12.

Power of self in relation to father declined over grade level ($p < .05$) and was less than power in relation to teacher or principal ($p < .001$). Students in the upper grades also showed a more egalitarian relationship with teacher than did younger students ($p < .025$). In the grouping task, the boys included more others in the self grouping ($p < .001$).

With regard to the measures of identification with particular others, the following results were found:

1. Younger girls (grades 6, 7, 8) identified less with mother than did older girls ($p < .001$), and less than boys of the same age ($p < .05$). Boys in grades 9, 10, 11, and 12 identified less with mother than girls in the same grades ($p < .05$).

2. Boys in grade 12 identified less with teacher ($p < .05$) and father ($p < .05$) than did the younger boys.

3. In all grades, with the exception of grade 12, boys identified more with father than did the girls ($p < .01$).

4. Among girls, identification with friend was greater in the higher grades than in the lower grades ($p < .05$). An opposite tendency was found among boys. Boys, in comparison with girls, had higher scores
in the lower grades ($p < .10$) and lower scores in the higher grades ($p < .05$).

**DISCUSSION**

In attempting to integrate these findings into meaningful patterns of self-other orientations, one notes first the differences between the sexes. As expected, boys in comparison with girls identified more closely with their father. Less expected and less explainable is the finding that boys included more others in the self group under the conditions of the identification task. These results may indicate the extended social field of boys in comparison with girls. Girls in the American culture tend to live under greater mobility restrictions than do boys and, therefore, on a probability basis will tend to be less inclusive with regard to identification with others.

This hypothesis is corroborated by the findings that differential developmental patterns were observed between boys and girls with regard to dependency and identification with mother and friend. In these three measures, similar sex by grade interactions were found. In each case the younger boys and older girls placed the self closer to others. Of particular interest, however, are the girls in grade 12 as opposed to the boys. The girls revealed greater social dependency, and identified more closely with mother, father, friends, and teacher. In grade 12, where departure from the parental group is imminent, the boys appear to have already begun to loosen bonds to parents, peers, and power figures in the immediate environment in preparation for the search and stabilization of a new group. In this search period between membership in the donor group and the host group yet to be selected, the boy enlarges the sphere of
of others whom he perceives as similar to the self. This more open self concept is hypothesized to be associated with greater transferability since maximal matching of self and other on a probability basis is effected through conditions associated with perceptions of similarity between self and other (Ziller, 1965).

This loosening of the bonds with parents observed with regard to boys in grade 12 was observed with regard to girls in grades 6, 7, and 8. These findings may also be interpreted in terms of Erikson's concept of ego identity (1959). The process of separation may be necessary or propaedeutic to the development of a differentiated and well defined concept of the self. Definition of the self in terms of mother and father is presumed to be associated with reduced accuracy of prediction of the individual's behavior in situations when the parents are not present (Ziller, 1964). It is of interest to note that like many developmental events, this pattern of separation appears earlier among girls than among boys.

It was also noted that the separation of self from parents among the boys in grade 12 is accompanied by an increase in self esteem. Girls indicated highest self esteem in grade 10. Perhaps the differential association between age and self esteem between the sexes is related to the attainment of near full physical growth and the general accompanying rise in social acceptance. Girls' physical and social development occurs earlier, their highest point of self esteem is observed earlier, and they tend to experience a separation from the parents earlier. The results also suggest, however, that a high evaluation of the self facilitates the development of an autonomous self.
This latter proposal is again associated with the theory of self-social constructs. Here it was proposed that high self esteem is a mediating mechanism acting as a buffer or baffle to delay action or response to evaluation concerning the self. The response lag achieved through high self esteem is now proposed as the underlying process associated with independence and the development of an autonomous self. Evaluative information directed to the individual with high self esteem is absorbed without releasing unintegrated facets of the self or amplifying the effects of the feedback through concern for public reaction. Repeated success with the assimilation of new information concerning the self is assumed to contribute to the development of ego information processing mechanisms which operate as defense mechanisms against an oscillating self portrayal and come to be an integral part of the self concept. Perhaps, more simple, high self esteem facilitates the selection and attainment of individual goals. The selection process is not impeded by protracted considerations of the anticipated objections of significant others and the achievement of these goals is not impeded by overweighting the distracting demands of significant others.

In addition to the implications for self identity, these data also suggest various continuities and discontinuities in developmental patterns. The gradual increase in dependency from grades one to nine may reflect the child's growing social orientation. A similar increase in self esteem was noted in self esteem beginning in grade 2 and continuing through grade 12 (Long, Henderson, and Ziller, 1965).

The tendency of boys in grades 7 and 8 to place the self close to teacher is an example of a discontinuity, since boys in earlier grades had been found to identify steadily less with teacher (Long, Henderson, and Ziller, 1965). This shift apparently occurs at the time the boy first encounters male teachers.
Another discontinuity which may be related to anticipated changes in group membership is the separation from father, teacher, and friend with regard to boys in grade 12. A similar sharp change is the break with mother which occurs with regard to girls at about the time of puberty. The self-other differentiation process may be particularly acute during this period for girls because of the strong and prolonged association with the mother.

Finally it must be noted that greater identification with "mother" was related to higher self esteem. In two previous pilot studies similar results were observed. These findings support the three-step theory of social development proposed in the first experiment. Here it was proposed that parental acceptance is the foundation of high probability of social desirability leading to higher self esteem and greater stability and predictability within a framework of self complexity. The association between identification with mother and self esteem lends support to this framework.

In summary, the findings of this study support the general hypothesis that the self concept undergoes significant changes during adolescence. In addition the findings demonstrate again the utility of the self-social constructs theory and instruments.
REFERENCES


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1. Per cent placing self next to other on both items
2. Per cent placing self within two circles of teacher on both items
3. Per cent placing teacher in egalitarian position, i.e., not directly above or directly below self

* N = 30 in each cell
TABLE 2  
TESTS OF SIGNIFICANCE WITH REGARD TO TABLE 1

1. Esteem  
Grade:  \( F = 2.37, \ df = 6/406, \ p = .05 \)

2. Dependence  
Grade:  \( F = 2.85, \ df = 6/406, \ p = .01 \)
Grade by sex:  \( F = 2.21, \ df = 6/406, \ p = .05 \)

3. Complexity  
Sex:  \( F = 3.48, \ df = 1/406, \ p = .10 \)

4. Grouping  
Sex:  \( F = 8.40, \ df = 1/406, \ p = .005 \)

5. Power  
a. Father  
Grade:  \( F = 2.12, \ df = 6/406, \ p = .05 \)
b. Father vs. teacher:  \( t = 14.9, \ p = .001 \)
c. Father vs. principal:  \( t = 16.0, \ p = .001 \)
d. Egalitarian relationship teacher:

Grades 6, 7, 8 vs. Grades 9, 10, 11, 12:  \( \chi^2 = 5.08, \ p = .025 \)

6. Identification  
a. Father  
1. Sex (all grades but 12):  \( \chi^2 = 8.7, \ p = .005 \)
2. Grade (boys only, grade 12 vs. all other grades):  \( \chi^2 = 5.7, \ p = .025 \)
b. Mother  
1. Younger girls (6, 7, 8) vs. older girls (9, 10, 11, 12):  \( \chi^2 = 11.3, \ p = .001 \)
2. Younger girls vs. younger boys:  \( \chi^2 = 3.80, \ p = \text{about}.05 \)
3. Older girls vs. older boys:  \( \chi^2 = 4.9, \ p = .05 \)
c. Teacher  
1. Boys only - grade 12 vs. all other grades:  \( \chi^2 = 5.1, \ p = .025 \)
d. Friend  
1. Younger girls vs. older girls:  \( \chi^2 = 9.3, \ p = .005 \)
2. Younger girls vs. younger boys:  \( \chi^2 = 3.27, \ p = .10 \)
3. Older girls vs. older boys:  \( \chi^2 = 5.6, \ p = .025 \)
STUDY IV
SELF-OTHER ORIENTATIONS OF INDIAN AND AMERICAN CHILDREN

The theory and research concerning self-social constructs point to the association between self-other orientation and social experiences, particularly early family relationships. In the study described here, differences in familial relationships between Indian and American children were presumed to be related to different self-other orientations. Cultural differences in experiences and expectancies related to differences in family values and customs were hypothesized to result in contrasting perceptions of self-other patterns of relationships.

The joint family experiences of the Indian child are presumed to have far reaching implications for the child's self-other orientations. The joint family has been described by Murphy (1953, p. 29) as "the household of persons comprising the sons of a given pair of parents, together with their wives, children, and unmarried sisters, and all those (e.g., aged parents) who are dependent upon them." In India, the child's social environment is largely the joint family (Narain, 1964; Mandelbaum, 1959). Lois B. Murphy (1953) summarized the profound and pervasive influence of the joint family in the statement that the Indian child "finds his being in the family constellation."

In this social setting, the child may have many parent surrogates. The child may be nearly as close to his aunts as to his mother and, indeed, all females of the joint family may be thought of by the child as having essentially similar or even identical functions. In this way the child is not disciplined by or responsible to a single individual. With regard to self-social
constructs, then, it is anticipated that the power orientation of American and Indian children will reflect these differences in the power field of their social environment.

Within the extended family constellation, the Indian child is "prized, magnified, pushed forward, warmed, threatened, rebuked, idealized, fancied in grandiose terms of future achievement." "Children are the stuff of one's being. It is the warmth and closeness to them that makes life important, meaningful, continuous." (Lois B. Murphy, 1953). An Indian official is quoted by Lois Murphy (1953) as suggesting that Americans bring up their children, but Indians live with theirs. The children accompany parents or parent surrogates everywhere.

In support of these observations, Naedoo and Fiedler (1962) noted that Indian college students in America esteemed significant others more highly than American subjects. Lois B. Murphy observed, too, (1953) that Indian children, in comparison with American children, were not exposed to as much conflict with authority. Fewer restraining forces emanated from Indian than American parental figures. In view of the aforementioned descriptions of Indian in comparison with American children, it is proposed that Indian children will indicate higher self esteem, dependence, identification, and lower power orientations.

**PROCEDURE**

**Subjects**

The Indian sample consisted of 50 boys and 50 girls from Form I of the M.V.D.M. High School in Visakapatnam, Andhra, South India. The children ranged in age from 10 to 14 with a median age of 12. Information about their caste, family income and number of siblings was obtained.
The American sample consisted of 50 boys and 50 girls from the public schools of Queen Anne's County, Maryland. These subjects were white and were matched with the Indian children on the basis of age and sex. They were drawn from the sixth to the eighth grades. Both samples varied widely in socio-economic background. The Americans had significantly fewer siblings and resided in a more rural area than the Indians.

Self-Social Symbols Tasks

The expanded form of the Self-Social Symbols Tasks used in the previous study was employed in the present study. Since the measures derived from the device tend to minimize the verbal component, its expected utility in cross-cultural studies is high.

The American subjects completed the test in groups. Written instructions rendered the instrument self-administering.

For the Indian subjects, the instructions for each item were read aloud in Telugu, the native language of the children, by one of the Indian experimenters. To supplement the non-verbal data, all subjects completed the 110-word adjective check list designed to measure complexity of the self concept. Again, for the Indian subjects, the list was translated into Telugu.

RESULTS

Split-half reliability coefficients for the various measures ranged from .31 to .79 (median .69, corrected for length) for the Indian subjects. The reliability estimates for the American subjects ranged from .58 to .92 (median .82).

Because self-family relationships were crucial within the present study, the identification and power items were analyzed without combining them into a single score in order to separate identification with mother and father and
power orientation with regard to mother and father.

Two by two analyses of variance were calculated for Indian and American boys and girls. Only the results with regard to the main effects of age will be reported and discussed. In doing so, few significant results were lost and these appeared to contribute nothing to the meaning of the theory or clarity of the results. Statistically significant differences (p < .01 or better) were found between the Indian and American samples on 12 of the resulting 15 measures. (See Table 1 and 2.)

The Indian students were found to indicate higher self esteem; greater social dependence; more self-centrality; closer identification with mother, father, teacher, and friend; and a more egalitarian relationship with mother, father, teacher, principal, and friend. Indian children also included fewer others in the self grouping.

An item analysis of the adjective check list revealed different configurations of adjectives for each group. A comparison of those adjectives checked most frequently may be categorized as follows:

Adjectives checked by more than 75% of both groups: active, clean, curious, friendly, gay, and happy.

Adjectives checked by more than 80% of the Indians and significantly fewer Americans: brave, calm, careful, clever, content, faithful, fine, glad, good, kind, large, patient, quiet, sensible, and smart.

Adjectives checked by significantly more Americans than Indians: anxious, bad, busy, careless, cheerful, different, eager, foolish, jealous, lazy, proud, quick, rough, silly, and wild.
DISCUSSION

On the basis of an analysis of the Indian joint family, it was hypothesized that Indian in comparison with American children would indicate higher self esteem, high social dependence, higher identification, and lower power orientation. The results strongly support the hypotheses.

Taken as a whole, the results may be interpreted as indicating that Indian children have a higher need for affiliation or value affiliation higher. In this regard, it is noted that 100% of the Indian children checked "kind" as self descriptive. The posited affiliative tendencies of Indian children and their comparatively high self esteem emerge against the background of the joint family nexus within which the child's position is highly valued and within which the child may find a multitude of social supports. By way of illustration, Indian students in relation to American students checked "good" and "important" significantly more often. Americans checked "bad" significantly more often.

In earlier sections it was noted that high identification with others, and particularly high identification with parents, is associated with high self esteem. This observation is supported again by the present results. The correlation coefficients between self esteem and identification with mother was .44 (p < .05), identification with friend (r = .37, p < .05), identification with father (r = .31, p < .05), and with teacher (r = .20, p < .05). These results indicate, at the very least, a close association between self esteem and acceptance of and by others.

As put forth in the theory of self-social constructs, self esteem must be viewed within a social context of significant others. Others provide a frame of reference within which the self is located and evaluated. Self meaning is
not an absolute, but a social relative.

It is also proposed that there exists for each individual, but also for individuals in general, a relative ordering of significant others, and that the self meaning is a function of the personal weighting of others and the others evaluation of the person.

In addition, a serial ordering of the effects of significant others must be considered. Psychoanalysts have long noted the potential primacy affects of parent-child relationships. The present results support these observations and even hint at the relative weighting of the relative influences of others. Assuming that the order of correlations between identification and self esteem indicates the relative influence of the subject of identification, it is noted that within the Indian sample the order from most to least influence was mother, friend, father, teacher. Within the American sample, the only significant relationship between identification and self esteem involved identification with mother. Perhaps, again, these results support the extended family concept in relation to personality development within the Indian culture. American children respond to a much more narrow spectrum of personally meaningful others.

The findings of higher self-centrality and fewer persons in the self group of Indian children are less easily interpreted. Still, looking upon the joint family experience as a pervasive mediating variable in the Indian culture, it is now suggested that extra-familial persons are less meaningful to the Indian child since the family factor is so heavily weighted with regard to self definition. Thus, he includes fewer others within the self grouping. With regard to self-centrality, again the child being the cynosure of the Indian family, he is inclined to develop an egocentric perception of the social universe, particularly since the social universe tends to be defined as the joint family.
Before wandering any further toward the boundaries of the data and the region of speculation, the inherent shortcomings of cross-cultural studies must be confronted. As Cattell (1963) has noted, making national comparisons such as these is both "invidious" and "notoriously tricky."

In the present study, the instruments used were equally unfamiliar to both samples, but the American group had probably had more experience with tests and testing. Moreover, since the adjectives and instructions were translated, meanings might have shifted slightly. The responses of the Indian subjects, however, show that the instructions were followed correctly.

More seriously, one may question whether the two samples, although matched for age and sex, were comparable. In the part of India in which the study was conducted, according to the 1961 census, only 14% of the children in this age group were in school. Thus, the Indian subjects in contrast to the Americans were among the educationally elite. The Indian sample also resided in a more urban area and had significantly more siblings.

The most crucial question, however, is whether or not the measures used in this study are valid for the Indian subjects. The internal consistency of the measures suggest that the measures possess some consistent meaning for the Indian subjects. Validity for the esteem items was indicated by the finding that the position of the social object in the row was significantly related to the social status of the stimulus object for each item and in each sample of subjects. For example, in both samples the "cruel", "unhappy", "unsuccessful" persons, as well as "teacher" and "salesman", were placed frequently to the right, whereas "father", "grandmother", "brother", "good athlete", and happy persons were placed to the left more frequently.
The final argument for validity concerns the results of this study. The results are predictable and meaningful. Thus, the instrument has construct validity within the Indian and American cultures.

At the very least, the utility of the Self-Social Symbols Tasks in cross-cultural research is indicated. In addition, the theory and results of the study have emphasized the critical nature of child-family relationships with regard to self-other concepts.
FOOTNOTES

1. The authors are grateful to Dr. Irving Barnett, Washington College, Chestertown, Maryland, who arranged the collaboration between American and Indian authors while he was a Fulbright Professor of Economics at Andhra University in 1964-1965.
REFERENCES


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### TABLE 2

**CHI-SQUARE TEST OF SIGNIFICANCE OF THE POWER ORIENTATION OF INDIAN AND AMERICAN CHILDREN**

<table>
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<th>American</th>
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<th>p</th>
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<td>69%</td>
<td>4.56</td>
<td>.05</td>
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<td>80%</td>
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* The percent represents the part of the total respondents who did not locate the power figure in the most vertical position in the implicit hierarchy.
SUMMARY AND CONCLUSIONS

Robert C. Ziller

The series of studies described here represent the integration of a theory of personality involving self-other percepts, seven instruments designed to measure the proposed components of self-other percepts using topological representations of self and significant others, and a program of research. In view of the halting progress of the study of personality, even guarded optimism concerning the present approach would be almost injudicious. It is, perhaps, safe to say that the outcomes of the present approach, although balanced with regard to the emphasis on theory, instruments, and research, rests largely upon the utility of the measures involved. Measurement remains as the missing link in personality research.

Yet measurement without theoretical integration often leads to a diffuse information search process, noncumulative findings, and findings too disparate to permit the mapping of any psychological region. On the other hand, theory separated from measurement and research provides inadequate guidance for theory development and generally leads to unlimited tautological systems, spirals of gossamer discourse, and scattered tangents to truth.

The general area of inquiry to which this series of studies have been directed is the social context of self-social constructs. The theory of self-social constructs involves the perception of self in relation to significant others. It was proposed that these percepts reflect aspects of the encompassing social field in which self-other orientations are evoked. Aspects of the social field investigated included changing social milieu, human development and the accompanying changes in the social milieu, cultural differences,
and social isolation. The results may be examined across these aspects of the social environment with regard to each of the self-other constructs.

Complexity was found to be associated with high social desirability. This finding is consistent with the thesis that avoidance of a limited number of categories for self definition is associated with a more permeable and adaptable self concept leading to facilitation of identification by others. In a more recent study (Thompson, 1965) it was found that complex individuals in contrast to simplex individuals rated others who are superficially different (older in this case) as more similar to themselves. Together these findings indicate differences in interpersonal perception associated with acceptance of and by others. For example, it may be hypothesized that children from culturally deprived homes identify more readily with complex rather than simplex teachers. The hypothesis again is based upon the assumption that a complex self concept facilitates maximal matching of self and other by self and by other.

High self esteem was found to be associated with social desirability, maturity, identification with parents, and closer family ties. The crucial nature of social support with regard to self esteem was underscored.

Self-centrality was found to be associated with low popularity, high geographic mobility, and close family ties. The results suggest that social isolation (including isolation within a family), or perhaps even a homogeneous social field (assuming interaction with self is tantamount to social homogeneity) is associated with the emergence of the self as the point of reference or a limited social frame of reference. The self central individual may be presumed to use an internal scale of judgment since a social scale of judgment is not as readily available. Thus, for example, it may be hypothesized that
self central children would be less subject to conformity since they are less other oriented.

It was also noted that social dependence was associated with social isolation, high geographic mobility, early as opposed to later developmental stages, and closer family ties. Consistent with the initial theoretical framework, the socially dependent child seeks identity with reference to stable and strong social subgroups. Separated from powerful others, the behavior of the dependent person is less predictable to himself and more anxiety producing. Security within the adult dominated social matrix is preferred to anxiety and semi-autonomy. It may be anticipated that behavior associated with later maturity will also be associated with social dependence.

The remaining components of self-other orientation were more specific to the studies involved. Nevertheless, by the criterion of the frequency with which the samples were differentiated by these measures, for this age group the power items with reference to teacher and father and the identification items with reference to mother provide useful instruments for the delineation of these significant self-other relations.

Perhaps the most significant generalization emerging from this research program is the interdependence of self definition and social environment. Earlier theory and research have by no means ignored this relationship. In the present context, however, the relationship assumes new meaning when viewed with regard to the many facets of the self concept and through the analysis of unique social configurations. For example, with regard to self esteem, it was noted that self esteem increased with age from school grades six through twelve. The change may be attributable in part to a comparison of the self with peers in the high grades and with parents in the low grades.
Since it is proposed that the self concept varies with regard to the social field, it may be hypothesized that under conditions where social mobility is difficult, if not impossible, self esteem and socioeconomic class will not be related, whereas under conditions of lower restrictions on social mobility the relationship will obtain. This suggests that a self chosen value system underlies the hierarchical ordering of self and others, and that this value system and the social comparison process differ according to the social environment. Thus, it may be hypothesized that self esteem and socioeconomic status will be related with regard to Negroes in socioeconomically open societies, but will be unrelated in less permeable societies.

In addition, differences in the social environment were found to be associated with differences in several self-other constructs. Not all facets of self-other relationships, however, were found to vary with changes in the social environment. In this sense, the component approach to self-other orientation is supported.

Having demonstrated the efficacy of the approach, a wide variety of studies immediately suggest themselves with regard to self-other orientation and critical aspects of the social field. For example, differences in the self-other orientations of children with communication difficulties (hearing, speaking, and reading) may be anticipated, particularly with regard to social dependence. Indeed, it has already been established that children with reading problems tend to indicate higher dependence (Henderson, Long & Ziller, 1965). Since the Self-Social Symbols Tasks places limited demands on conventional communication skills, the approach offers unusual promise in this area of research.

Further research is also necessary with regard to differential family constellations in addition to the joint family. For example, the relationship between self-social constructs and sibling sex structure, twins, and mother or father absence are some studies with theoretical implications for self-social constructs.
REFERENCES


Figure 1. Hypothesized resolution of conflict between perception of father-self in relation to power and egalitarian forces.
APPENDIX

I. THE SELF-SOCIAL SYMBOLS TASKS
Name

Boy  Girl  (Circle one, whichever you are)

Where were you born?

How many different communities have you lived in?

How old are you?

On the following pages you will be asked to draw, arrange and select objects according to however you feel. There are no RIGHT or WRONG answers. We are just interested in finding out how people will complete these tasks. Once you have finished a task, do not turn back to it. Work quickly --- when you have finished one page, go on to the next.
Task 1

Instructions:

The circles below stand for you and important people in your life. Mark the circles in any way you wish using one of the following letters for each circle:

D for doctor
F for father
Fr for friend
H for the person with whom you are most happy
M for mother
S for yourself
Su for the most successful person you know
U for the person with whom you are most uncomfortable
Task 2

Instructions:

The circle below marked "S" stands for yourself. Place an F in one of the other circles to stand for your father.
Task 3

Instructions:

In the large circle below, draw two smaller circles; one to stand for yourself and a second circle to stand for a friend. Place an S in the circle for self and an F in the circle for your friend.
Task 4

Instructions:

These circles stand for the following people:

- M mother;
- F father;
- Fr friend;
- D doctor;
- T teacher;
- U person with whom you are most uncomfortable;
- H person with whom you are most happy;
- Su most successful person you know.

Arrange these circles into as few or as many groups as you wish. Make sure that you include the initials within the circles when you arrange them into groups within the square below. It does not matter how you arrange these groups nor how many circles you place in each group, only allow enough space between each group so that they can be seen as separated. Use each circle only once. When you have finished grouping the circles, draw a large circle around each of the groups in order to keep them separated.
Task 5

Instructions:
The circles below stand for you and important people in your life. The circle with an S in it stands for yourself. Choose any one of the other circles to stand for your father and place an F within it.
Task 6

Instructions:

Each of the small circles within the large circle stands for other people. Choose any one of the three circles shown at the bottom of the page to stand for yourself. Copy that circle somewhere within the large circle.
Task 7

Instructions:

The small circles shown below stand for your Parents, Teachers, and Friends. Draw a circle to stand for yourself and place it anywhere within the large circle below.
Instructions: Here is a list of words. You are to read the words quickly and check each one that you think describes YOU. You may check as many or as few words as you like—but be HONEST. Don't check words that tell what kind of a person you should be. Check words that tell what kind of a person you really are.

1. able
2. active
3. afraid
4. alone
5. angry
6. anxious
7. ashamed
8. attractive
9. bad
10. beautiful
11. big
12. bitter
13. bold
14. brave
15. bright
16. busy
17. calm
18. capable
19. careful
20. careless
21. charming
22. cheerful
23. clean
24. clever
25. comfortable
26. content
27. cruel
28. curious
29. delicate
30. delightful
31. different
32. difficult
33. dirty
34. dull
35. dumb
36. eager
37. fair
38. faithful
39. false
40. fine
41. fierce
42. foolish
43. friendly
44. funny
45. gay
46. generous
47. gentle
48. glad
49. good
50. great
51. happy
52. humble
53. idle
54. important
55. independent
56. jealous
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60. little
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64. lucky
65. mild
66. miserable
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