This paper focuses on the theory and rationale of assessing the social behavior of children. It is asserted that child social behavior must be assessed accurately in order to do research on socialization. Socialization is defined as the process by which an individual learns to interact with others. It is proposed that it is possible to design a peer rating approach to overcome weaknesses of the approaches most often used at present, the sociometric and the observation methods. It is noted that such a peer rating approach should employ several randomly assigned raters for each ratee in order to minimize error due to rater response tendencies and unique rater/ratee relationships. It should also employ an item sampling technique to examine as many social behaviors as possible. A review of the socialization literature and trial runs of measurement procedures led the authors to identify 12 constructs or variables related to the socialization process. These constructs are stated to be logically organized into three groups or scales: Individual Prosocial Action (leadership, independence, assertiveness, competitiveness), Social Interaction (cooperation, conformity, authority relations, control of aggression), and Affective Relationships (liking others, social acceptance, being liked, popularity). (Author/JM)
Social Behavior Assessment of Elementary School Children --

Theoretical Rationale for a Peer Rating Scale

and Its Role In A Longitudinal Study

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Design of the Longitudinal Study of Elementary School Effects

The overall study within which a Peer Rating Scale was developed was designed to describe patterns of cognitive, affective and social growth among elementary school children and to identify the school and home variables which influence such growth. The study seeks answers to two kinds of questions: How do children grow and develop during the elementary school years? What are the school and home influences affecting this growth? The design of the study has evolved over a period of four years under contracts from the U.S. Office of Education. The study design has been completed and awaits funding for implementation.

Children in grades 1 through 6 will be tested in the fall and spring of the initial year of the study. Intensive data

1A paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, April, 1974.

2The research reported here was supported by the National Center for Educational Statistics of the United States Office of Education, Contract OEC-0-725283 (Ernest D. McDaniel, Principal Investigator).
will be collected about the home background of the children 
and the characteristics and behavior of the classroom teacher. 
During two subsequent years, data will be collected from a 
limited sample of children who originally were tested in grades 
1 and 4. By linking the three-year segment of growth from the 
first grade group and the three-year segment from the fourth 
grade group, a picture of development spanning the six elementary 
school years will be obtained.

The study should help answer a wide variety of questions 
related to child development and instructional processes. 
It will permit the tracing of developmental patterns for 
children in general and for special subgroups, such as black, 
poor, handicapped, gifted, inner city or rural children. It 
will permit investigation of the impact of various teaching 
styl es and instructional strategies. It will lead to a more 
complete understanding of the role played by parental attitudes 
in the child's achievement, attitude toward school, self-concept 
and social development. Finally, the study will offer opportunities 
to investigate the complex interactions among home, school and 
student variables as they evolve through the elementary 
school years.

Theory and Rationale For A Peer Rating Scale

One of the major variables to be assessed in the longitudinal 
study is the social behavior of the children. The major purpose
of this paper is to present the theory and rationale underlying the development of an instrument to assess this variable.

Most definitions of socialization specify a learning of social behaviors and their consequences (Glidewell, 1966) or an acquisition of social knowledge, skills, and attitudes (Brim, 1966). Socialization is the process by which an individual learns to interact with others. The family and the school are the primary agents of socialization. Glidewell (1966) presented evidence supporting the feasibility of measuring socialization in the classroom. He reported that a very stable social structure exists in elementary classrooms. Goslin (1969) suggested that this social structure varies greatly in its impact on children, and there is great variability in school efforts to develop children's social abilities. Bauer (1971) concluded that "...guiding children and youth in the development of well-balanced, effective personalities constitutes the teacher's single most important function (p. 65)." In order to improve our understanding of how teachers can help children in socialization, there is a need to research the socializing effects of schools upon children. But in order to do so, effective methodology and measurement procedures must first be developed.

Many personality researchers have employed a self-report questionnaire approach to personality assessment. However, the self-report is subject to social desirability response bias.
(Edwards, 1957) and is not well suited to measuring the interaction that occurs in a social situation. Some researchers have also used an observation approach to the assessment of socialization. However, Tuddenham (1971) noted the following:

The social domain of children is peculiarly inaccessible to the adult observer, whose very presence alters the situation under study. In order to investigate those aspects of child personality which are revealed in the social relationships obtaining among children, a method is needed which permits the children themselves to express their attitudes toward one another in a manner which is adapted to their capacities, which avoids disturbing them ...and which meets the practical criteria of ease of administration, quantifiability, and reliability of measurement (p. 105).

Tuddenham suggested that the sociometric method should be used in assessing the social characteristics of children. However, the sociometric method typically produces personality information on only a small portion of the total social group (Gronlund, 1959).

It should be possible to design a peer rating approach that can overcome the weaknesses of the sociometric and the observation methods. Such a peer rating approach should employ several randomly assigned raters for each ratee in order to minimize error due to rater response tendencies and unique rater-ratee relationships, and it should also employ an item sampling technique to maximize the number of social behaviors that can be examined. Thus, the purpose of this study was to develop a peer rating scale of socialization using multiple peer raters and item sampling procedures.
Socialization Domains and Constructs

A review of the socialization literature and trial runs of measurement procedures led to the identification of twelve constructs or variables related to the socialization process. These constructs can be logically organized into three groups or scales -- Individual Prosocial Action, Social Interaction, and Affective Relationships.

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Individual Prosocial Action

The social behaviors included under Individual Prosocial Action reflect independent, outgoing, assertive social action on the part of the individual. The crucial aspect is the individual's positive behavioral thrust toward others.

Leadership is the ability to utilize and direct the ideas and actions of others in the pursuit of goals or solutions to problems. Stodgill (1948) reported that leadership exhibited in school was predictive of continued leadership in community life. Bass, et. al. (1953) found that the leaders among sorority women also tended to be sociable. Durojaiye (1969), in a...
study of elementary school children, found correlations as high as .92 between leadership and popularity variables. Ahlbrand (1972) also found strong relationships between leadership and popularity in elementary school children. A number of other researchers (Bales, 1950, 1960, Mann, 1958, 1967) have also studied the leadership variable across a variety of social situations and concluded that leadership is a primary socialization variable.

Independence is the ability to think for oneself and to accept social responsibility. In a review of socialization, Zigler and Child (1969) reported that "...the diminishing dependence of the child as he grows older involves positive development of more independent modes of responding to the same situations that formerly elicited dependent reactions ... (p. 543)." Dunnington (1957) compared observer ratings of preschool children with sociometric nomination data and found that popular children were more independent than less popular children. Research by Whiting and Child (1953), and by Sears, Maccoby, and Levin (1957) indicated that a culture's attitude toward dependence was related to the independence training it employed. McCandless (1967) argued that the dependence-independence variable has not been researched as extensively as it should. He concluded that socialization "... depends on learning that other people are necessary, and first becoming dependent on them, then independent from them."
Assertiveness refers to the ability to take initiative, express ideas, respond to questions, and, in general, show confidence. The individual achieves a degree of self-assertion within a group by interpreting his own status in relation to those around him (Campbell, 1964). Holzberg and Posner (1951) found a significant positive relationship between a sociometric measure of assertiveness and supervisor ratings of assertiveness in student nurses. Berg (1960) found a strong relationship between assertiveness and leadership. Borgatta (1963) factor analyzed observation data gathered with a social behavior rating scale and identified assertiveness and sociability as the two most prominent factors.

Competitiveness is an inner-directed need to achieve a high standard of excellence in all of one's actions. Huizinga (1949) maintained that competition serves to advance civilization by fostering perseverance and devotion to the social group. The need to compete against oneself, against others, or against standards of excellence has been researched extensively by McClelland (1961) as part of the need for achievement theory. Kagan (1962) defined competitiveness as the desire to become involved in games or tasks that test or require superior ability. Competitiveness is a highly researched and quite well-defined variable in the socialization process.
Social Interaction

The next four constructs -- cooperation, conformity, authority relations, and control of aggression -- are termed Social Interaction constructs because they arise as a result of an individual's interaction with others on an individual and on a group basis.

Cooperation is the ability to work compatibly with others toward a common goal. Piaget (1954) viewed cooperation as the developmental trend which reflects the child's movement from an egocentric perspective to one that includes others. Schmidt (1958) found that boys who scored high on a sociometric measure also tended to be cooperative. Peterson (1968) reported a positive relationship between peer acceptance and work participation. Evans (1966) reviewed the research on cooperation and concluded that cooperative activity serves to improve personal adjustment. Many existing measures of social adjustment focus on cooperation as a salient socialization variable.

Conformity is the ability to behave according to norms and rules, when appropriate, instead of behaving according to personal inclinations or wishes. Conformity is defined here in a positive sense. The individual chooses to conform for acceptable reasons rather than blindly agreeing with the majority. Goslin (1969) defined conformity as "...an adaptive accomplishment to be explained in terms of complex mechanisms integrating individual behavioral dispositions with the needs of the social..."
structure (p. 508)." Thompson and DiVesta (1971) suggested that "the development of conforming behavior patterns runs parallel with the socialization process (p. 306)." Many researchers (Campbell, 1964; Coleman, 1961; Kagan, 1962) have pointed to the pressures to conform that are exerted by the peer group. Shaw (1971) concluded that "...conformity to group norms ...produces the undesirable negative effects so frequently attributed to it when the group member conforms only for the sake of conformity (p. 258)." For the purposes of this study, conformity is viewed as a form of socialized behavior in which the individual responds affirmatively and appropriately to reasonable social expectations.

Authority relations refers to the ability to relate to or interact with people who are in directive, controlling or administrative roles. Getzels (1969), in delineating a framework for a social psychology of education, maintained that the relationship between the school as authority and the student as individual is dependent upon the interaction between the formal structure of the school, the informal structure of the student culture, and the personal characteristics of the student. Sometimes a clash occurs between the formal structure of the school and the informal structure of the student culture (Gordon, 1957). The resolution of this conflict is usually left up to the teacher.

Many researchers (Lewin, Lippitt, and White, 1939; Sanford, 1962; Shaw, 1959) have found support for the hypothesis that
the formal administrative structure of the school, as well as the classroom and peer climate, influences student behavior. Kidder (1971) analyzed the classroom social variables for a sample of fifth-graders and found a significant positive relationship between students' status in the classroom and their affective reactions to the school, teacher, and principal. Thus it appears that students' ability to interact with authority figures is an important aspect of social development.

Control of aggression refers to one's ability to inhibit verbal and physical expression of hostility and anger, especially when faced with frustrations. According to Kagan and Moss (1952) "...the display of aggressive acts is a regular concomitant of development. Aggression is subject to socialization pressures, for the child does not have complete license to unleash his anger when in classes." Bandura and Walters (1958) concluded that the "...process of socializing aggression involves training the child to react to frustration in ways that are relatively acceptable (p. 453)." Zigler and Child (1969) reported that "...much of the research dealing with socialization of aggression has stemmed from views of aggression as acquired rather than innate (p. 525)." Zigler and Child also noted that positive reinforcement of aggressive responses can come from "parents, peers, or others (p. 533)." McCandless (1967) suggested that aggression in our society is "circular". When a child "...is aggressive, his parent or teacher retaliates, the child is further angered and frustrated and thus more aggressive ... (p. 152)."
Thompson, et al. (1971) suggested that schools should train children to control their aggression and redirect their energies along more socially approved lines. It is obvious that control of aggression is a critical socialization variable.

Affective Relationships

The next four constructs -- liking others, social acceptance, being liked, and popularity -- represent the affective components of social relationships. Although many of the socialization constructs already discussed in this review undoubtedly have a certain amount of affective content, the next four constructs are primarily affective in nature. Most research on affectivity in socialization has been global and general -- few researchers have focused on separate aspects.

Liking others is the desire to interact positively with others. McCandless (1967) described a successfully socialized person as one who "...likes people and has a generally positive attitude toward the rules of his society (p. 340)." The "liking others" variable is much like the need for affiliation variable, hypothesized by Murray (1938), and later researched by McClelland et. al. (1953) and by Schacter (1959). Mann (1967) developed a behavior rating system that included an affective variable and reported some evidence of reliability and validity for the variable. Dunnington (1957), as well as Lippitt and Gold, (1959) found that sociometrically popular children showed more signs of liking and reaching out to others than less popular children. Liking others seems to be a discreet socialization variable.
Social acceptance refers to a willingness on the part of the social group to allow a particular member to participate in group activities. The prospect of social or peer acceptance sometimes forces the individual to conform. Northway (1944) suggested that sociometric data is an index of a person's acceptance within a specific social setting. The "social acceptance" construct represents the minimally favorable group reaction to an individual member. Social acceptance is often viewed as the first crucial sign or characteristic of socialized behavior. To be accepted implies that an individual has acquired some appropriate socialization skills.

Being liked refers to affiliative feelings that are expressed by individual group members toward a particular group member. Being liked implies that the individual has attained social acceptance in group situations. Being liked thus involves a greater degree of socialization than does social acceptance. Gronlund (1959) reported that children are liked more by their peers if they possess such personality characteristics as agreeableness, friendliness, generosity, kindness, and sincerity. Ahlbrand (1972) also found that children are liked if they are cooperative and friendly. Thus, being liked was included as a variable in the socialization scale.

Popularity indicates that an individual is liked by most of the social group. Erkowitz (1969) defined popularity as "...a person's ranking in his group according to some hierarchy of "restrige or worth (p. 84)." Gronlund (1959) suggested that
popularity is indicative of potential for leadership. A
direct measure of popularity is the number of nominations an
individual receives in a sociometric test. Popularity is the
most well-known and widely researched of the affective socialization
variables.

Although the twelve constructs and the three logical scale
groupings served to provide a comprehensive rationale for the
later development of a peer socialization rating scale, it should
not be assumed that complete orthogonality of constructs or
scales was expected. The major purpose in identifying these
theoretical components was to assure comprehensiveness in
developing a socialization measure.

The Sociometric Approach

Sociometric measurement procedures were first developed
about forty years ago by J. L. Moreno (1934). Since that
time there have been several adaptations of the sociometric
method, but the method has remained basically the same. The
sociometric method usually involves group members in naming
or "nominating" those peers with whom they would like, or
perhaps not like, to perform some criterion behavior.

Gronlund (1959) as well as Lindzey and Byrne (1968)
reviewed the sociometric method extensively. It is generally
agreed that a sociometric instrument properly constructed
and administered, can yield reliable and valid information on the
peer group. Although the traditional sociometric method has
several important advantages, it also has some weaknesses that
must be overcome if the method is to be truly useful.
One disadvantage of the sociometric method is that "...a large number of pupils tend to choose the same few highly chosen individuals (Gronlund, 1959, p. 48)." The result is that many group members receive no score, and this in turn produces severely skewed distributions. Another disadvantage (Gronlund, 1959) is that assessments of personal and social criteria have shown considerable overlap when used in educational settings (p. 43). Also, since the sociometric method involves free choice on the part of the participants, halo effect may be substantial.

Despite the weaknesses of the sociometric method, reliable and valid measures have been obtained by a number of researchers (Bauer, 1971; Tuddenha, 1952). Havighurst (1962) conducted a great deal of research on socialization and reported that sociometric procedures were useful research tools. Lindzey and Byrne (1968) reported that sociometric measures under some conditions can be used as a direct measure of leadership (p. 405). These several studies indicate that a sociometric instrument can yield useful data.

The Peer Rating Approach

While the sociometric method has several serious weaknesses, a peer rating approach can overcome the weaknesses of the sociometric method provided that several randomly assigned raters are employed for each ratee and that an item sampling technique is used.

Although personality researchers have tended to overlook the peer rating approach in favor of self-report inventories...
(Smith, 1967), a logical comparison of the two techniques suggests that, for situations involving extensive social interaction, peer ratings have advantages not to be found in self-report data. Smith (1967), for example, cited the following advantages of peer rating data:

The information used is generated in the non-test context of the individual's real-life environment.

It taps responses to peers accumulated over long periods of time rather than during one particular test period.

It is accumulated and stored by numerous observers with whom the individual has differing personal relationships, and who, consequently, view him from different perspectives (pp. 968-969).

The third advantage cited by Smith highlights the usefulness of peer rating data. Whereas self-report data is subject to the tendency to claim socially desirable behaviors as characteristics of oneself, regardless of whether one actually possesses such behaviors (Cronbach, 1970; Crowne and Marlowe, 1964; Edwards, 1957), peer rating data are free of this response bias. Peer ratings are also useful because they can measure the interaction occurring in miniature social systems; because they increase interest and motivation; and because they quickly and inexpensively measure a variety of personal-social constructs (Lindzey and Byrne, 1968).

The question of who can accurately rate behavior has generated extensive research (e.g., Allport, 1937; Bruner and Taguiri, 1954; Taft, 1955), but Lindzey and Byrne (1968) concluded that:
Everyone is an experienced rater when it comes to social judgments. Each of us has a vast body of experience in deciding with whom we wish to interact and whom we wish to avoid...One might say that the individual who uses these techniques is taking advantage of the largest pool of sensitive and experienced raters that is anywhere available (p. 454).

Empirical support for the usefulness, the reliability, and the predictive validity of peer ratings of personality has been reported by several researchers (e.g., Astington, 1960; Carroll, 1952; Doll, 1963). Smith (1967) administered personality rating items (Cattell, 1957) to students in a small junior college. He found that the peer ratings had high reliability, high predictive validity (with grade point average as a criterion), and a highly stable factor-analytical structure. Research by Gibson and Hanson (1969) showed that peer ratings of upper elementary boys, involving seven personality characteristics was reliable and valid. Extensive research findings were also reported by Lorber (1970) for the Ohio Social Acceptance Scale, a sociometric-rating scale in which children nominate their best friends and rate them on a variety of socialization dimensions. Lorber concluded that the rating scale possessed good reliability and validity. The peer rating approach thus seems to be a viable approach to the assessment of socialization.

Consideration of the strength of the peer rating approach should, of course, be balanced by a consideration of the possible problems that can accompany the use of the peer rating technique. Guilford (1954) identified the following possible sources of error in rating data:
1) rater response tendencies such as leniency or overseverity
2) unique rater-ratee relationships
3) rater unfamiliarity with ratee
4) faulty item construction

Most of the sources of error that Guilford specified for rating data can be minimized in the case of the peer rating approach. The first source of error, rater response tendencies, can be reduced by employing rating items that involve familiar day-to-day activities (Gronlund, 1959). Rotter and Tinkleman (1970) asserted that behavioral ratings are reliable and valid for clearcut items, whereas ambiguous items may introduce rater response tendencies. Thus, clearly stated items that refer to familiar activities will allow raters to respond objectively without resorting to response biasing tendencies. Another way of reducing rater response tendencies is to employ several raters for each ratee. The result is that rater response biasing tendencies that may be operating are averaged across ratees and hopefully reduced by counteracting one another.

The second source of rating data error, unique rater-ratee relationships, can be minimized through random assignment of ratees to raters. This procedure reduces the likelihood that unique rater-ratee relationships occur. The third source of rating data error, rater unfamiliarity with ratee, is minimized by obtaining peer ratings from groups which have been intact over a relatively long period of time. Finally, the fourth source of rating data error, faulty item construction, can be avoided through precise item wording, attention to item relevance and objectivity, and item revision guided by item analysis information.
Because the sources of error can be minimized and because the peer rating approach has advantages that other techniques cannot offer, it was concluded that the best approach to the assessment of social behavior would be by means of a peer rating scale. Efforts were undertaken to develop and validate a peer rating scale that would overcome the weaknesses of the sociometric method and would reliably and validly assess classroom socialization.

Work by Haak and Peck (1972) served as a preliminary guiding model for the efforts aimed at developing a peer rating scale. Haak and Peck (1972) developed a Behavior Rating Scale Jury System (BRSJ) designed to solve the problem of skewed distributions resulting from a nomination approach. Personal communication with Haak and Peck (1972) was influential in focusing the present research on a peer rating approach rather than a nomination approach.

Summary

Twelve socialization constructs were identified. They can be logically classified into three groups characterized by Individual Prosocial Action, Social Interaction, and Affective Relationships. Empirical research tends to support such an organization. Strong empirical support was found for the socialization constructs characterized by Individual Prosocial Action and Social Interaction, but less empirical research was found for the socialization constructs that involve Affective Relationships.
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