The purposes of this paper are: (1) to identify uses of the term social competence for preschool and early school children, with origins directly in research, and (2) to formulate a definition of social competence reflecting consensus across three different research perspectives. From an ethnological perspective, social competence consists of adaptive interactions in the natural environment provided by classrooms. The second research perspective construes competence in the framework of structural theory of personality and as dimensions or clusters of task oriented behavior, extraversion, or the use of opportunities in the classroom. The social theory perspective analyzes competence as ability to assume roles and to express varied repertoires pursuant to goal attainment. Theory, background, definition of behavior, methodology, and related research for each perspective is included. A modified definition of social competence emerges from the combination of the three separate perspectives and includes such concepts as purposiveness, adaptiveness, flexibility, and analysis of rules governing social interactions. (Author/DE)
INTRODUCTION

Uses of the term social competence vary considerably due to real differences of opinion about the nature and scope of positive behaviors but also due to differences of approach. The absence of agreement or rationale for unifying these alternative views produces a lack of clarity in the field that limits the analysis of relationships with other variables and the design of instruction to encourage competence. The purposes of this paper are to identify uses of the term social competence with origins directly in research and to formulate a definition reflecting consensus across different research perspectives.

Because definitions of social competence have been so varied, sometimes including health (Zigler, 1973) and personal maintenance (Anderson and Messick, 1973), this review will be limited to approaches that fall within fairly circumscribed criteria. The focus will be on children in the preschool or early school years although much of the discussion can be generalized to older children. Tentatively, social competence will be defined as productive and mutually satisfying interactions between one child and peers or adults. Productive interactions attain personal goals of the child, whether immediately or in the long run, which are adaptive in classroom settings. Interactions will be satisfying to the child when goals are attained, and to the others if actions in pursuit of the goals are received in either a benign or positive manner.
Areas excluded from this review are definitions of positive behaviors or competence that have not generated research in classrooms. Among these are the well-known views of R. W. White (1958) and M. B. Smith (1968) suggesting an intrinsic motivation for competence or mastery. Another example is instrumentation identified under the label social competency but not associated with a background of research (e.g., Levine, Elzey, and Lewis, 1969).

The study of social competence is important for four reasons. First, behaviors associated with social or interpersonal competence are required for participation in society. Teachers and parents rate social skills, goal directedness, and emotional stability as more likely to lead to school and life success than variables such as IQ and aptitude (Getzels and Jackson, 1961). Second, variables associated with social competence may enhance predictability of academic success beyond information solely from the cognitive realm (Cattell, Sealy, and Sweney, 1966; Holland, 1960; G. M. Smith, 1967; 1969; 1970). Third, the study of social competence encourages understanding of an integrated area of human behavior that shows a more complete picture of social development than is afforded by more isolated components, such as empathy or locus of control. Finally, analysis of competence suggests behavioral components that may clarify the nature of self-esteem.

At least three research perspectives on social competence can be identified. First is the ethological view that social competence consists of adaptive interactions in the natural environment provided by classrooms. A second view construes competence in the framework of structural theory of personality that attempts to integrate descriptive features of behavior. The final view analyzes competence with social theories of behaviors underlying purposive interactions.
Associated with each perspective is (1) a theory and background for expectations of competence; (2) a definition of the behaviors and the methodology used; and (3) related research denoting correlates of the behaviors, including sex differences and predictions of other performance.

An Ethological View of Competence

Definitions of competence should reflect the extent to which behavior is adaptive in the environment where it occurs. Competent as contrasted with non-competent individuals possess a variety of skills that enable them to adapt across a variety of settings. The analysis of competence in the classroom setting is particularly important because societal expectations for performance require children to adapt to educational contexts. An ethological analysis of competence in classrooms should produce a better understanding of these adaptive skills.

Theory and Background

Ethology identifies the mechanisms underlying behavior patterns having evolutionary significance within given ecological conditions. The evolutionary significance of behavior is determined by the degree to which the patterns appear to contribute to species survival or are adaptive. Specification of the ecological conditions or environment under which the behavior occurs is important since the adaptability of patterns may vary across settings.

The full spectrum of ethology has been translated into six major questions: (1) What is the nature and frequency of behavior patterns the organism employs? (2) Under what internal and external stimulus conditions are they employed? (3) What individual and species functions do such behavior patterns serve? (4) How do such patterns come to exist phylogenetically or ontogenetically? (5) What neurophysiological and endocrinological
mechanisms underlie such patterns? and (6) What status and distribution do such patterns have in other species? An implied sequence in the study of behavior is indicated by these questions such that early investigations are "observational, inventory-descriptive, and correlational; the second phase more experimentally and psychometrically interventive and manipulative" (Charlesworth, 1973, p.3).

The ethological approach can be readily adapted to psychological analysis leading to a comprehensive understanding of behavior. Throughout the investigation the emphasis is on understanding behavior in its natural context or nearly so as might be simulated in a laboratory. The degree of an individual investigator's interest in comparative issues will influence the number of questions addressed from the above list.

Definition and Methodology

During the mid-sixties, an ethological investigation was initiated to define behaviors considered adaptive for preschool children in the classroom as a prior step to creating new curricula, which was being done elsewhere in profusion. The Harvard Preschool Project (B. L. White, Kaban, Marimor, and Shapiro, 1972) started with the assumption that so little was known about adaptive child behavior in the ecology of classrooms that the formulation of curriculum goals should be supported by an ethological analysis. Children in preschool classrooms were classified into high and low competence extreme groups based on teacher and researcher consensus. The selection task was simply to identify three children who would succeed in school and three who would not. Anecdotal reports on the activities of these children were collected over the next six months. Analysis of differences between the groups on anecdotal data showed differential representation on specific behaviors considered to be adaptive in classrooms for preschool children.
The behaviors were organized into an event-sampling instrument to assess social competence by Ogilvie and Shapiro (1970). Only behaviors that differentiated the high and low competence groups were included. The instrument recorded interactions with adults—seeking attention, utilizing resources, expressing hostility and affection, exhibiting pride, and adult role playing; and interactions with peers—leading and following, expressing hostility and affection, and competing for equipment and attention. Some of these interactions were coded as successful or unsuccessful. Positive behaviors such as utilizing resources occurred with greater frequency among highly competent children, whereas hostility and unsuccessful social imitations were more prevalent among less competent children.

Research on Competence

Data from the social competence instrument were analyzed in two ways. First, weighted frequencies of individual behaviors were summed to produce a total competency score with interobserver reliabilities in the .80's (Ogilvie and Shapiro, 1970). Total competency scores correlated near zero with SES (B. L. White, 1974), and in a separate investigation predicted the extent to which sex role identification is flexible, i.e., not exclusively same-gender related (Sisson, 1973). Individual differences on the total score reported for children as early as 10 to 18 months based on observations collected in homes corresponded to observed early child-rearing practices. Extensions of this work in the Brooklyn Early Education Project resulted in an intervention approach for child-parent interactions. In a second data analytic approach, factor analysis of frequencies of observed behaviors in preschool classrooms generated two orthogonal dimensions (Ogilvie, 1969). The first factor was Peer Interaction and
Ego Strength (affection, hostility, competing) vs. Ego Weakness (unsuccessful attention seeking, imitating female peers, compliance); the second was Adult Orientation and Pride (successful attention seeking, pride in products or attributes) vs. Self-Doubt and hostility to Adults (imitating male peers, verbal and physical hostility). Although the analyses only included data for 74 boys aged 3 to 6 years, and the resulting dimensions seem difficult to clearly interpret, the factors corresponded remarkably well with teacher ratings. Factor scores for seven of 10 boys rated least competent by teachers fell in the Ego Weakness and Self Doubt quadrant, and 10 of 10 children rated most competent were in the other three quadrants. Further analyses with either approach have not been reported.

An observation instrument (Bronson, 1974) with elements similar to the social competence instrument but based in part on theories of intrinsic motivation has been designed to assess "Executive" and social skills in preschool children. Executive skill is competence to select tasks appropriate to one's ability level, to organize materials, to use effective coping strategies, to resist distraction, to notice and correct errors or request aid, to persist, and to attain goals. Social skills involve the ability to control and direct one's self constructively in social situations, particularly with reciprocity, and to influence others with socially approved strategies. The two abilities are assumed to occur independently. The instrument is currently employed in Bronson's doctoral dissertation and in other studies although research results are not yet available.

In summary, ethological analysis combined with a psychometric approach in the Harvard Preschool Project produced a useful definition of competence in terms of adaptive behaviors, such as successfully getting adult attention and utilizing adults as resources. The instrument yields reliable total...
scores that correlate meaningfully with other variables and factor dimensions with promise for future investigations. The definition partially laid the foundation for future intervention efforts, as was originally planned. The instrument's limitations stem primarily from the vague definition of the initial criterion on which children were assigned to high and low groups prior to collecting anecdotal data, and the apparently arbitrary procedure for weighting and combining frequencies to produce a total score. Consideration of the instrument's usefulness and face validity may temper the impact of these criticisms.

**Structure of Personality**

Analysis of broad personality constructs may provide a context for discussing specific characteristics associated with competence. A personality theory that integrates a variety of constructs may reveal a nexus of characteristics that can be identified as bearing positive attributes. Individuals who possess these attributes would be termed competent, whereas their absence would be associated with non-competence.

**Theory and Background**

The structure of personality approach emerged following the suggestion of a model for personality employing two factor-analytic dimensions: extraversion vs. introversion and affection vs. hostility. These two bipolar factors accounted for most of the variance in personality ratings in a variety of studies (Becker and Krug, 1964; Peterson, 1960; Schaefer, 1961). Nevertheless, the factors share a problem common to many factor analytic studies: limited generality across different subjects or stability with the same subjects across time (Schaefer, 1961).

Among the possible solutions to the limitations of factors is the analysis of clusters of items. When positioned on a two-dimensional matrix
with the factors as axes, clusters of items retain a stable relationship with each other even though the precise location of the reference vectors themselves may vary from study to study. For example, clusters defining the following bipolar constructs have been found starting from the extraversion axis: cooperative vs. defiant hostile, loving vs. distrusting, sociable vs. withdrawn, assertive vs. submissive, and emotionally demanding vs. calm-compliant (Becker and Krug, 1964). This "circular order of complexity" or "circumplex", patterned after Guttman's (1954) radex theory, suggests that item clusters may be of greater moment than the factors since their spatial arrangement is stable. Characteristics of individuals are identified by referencing scores on constructs defined by clusters of items.

Definitions and Research

Although most studies in this area have attempted to analyze personality structure and its antecedents, social competence may be defined in a variety of ways on the circumplex. Among the alternatives are: (1) isolation of one or more quadrants based on implicit expectations for positive attributes; (2) identification of factors or constructs associated with competence from research demonstrating correlations with other variables; and (3) association of competence with change over time between proximal constructs. The first is an attempt to reach an a priori definition and the others are research approaches. Ogilvie's (1969) work reviewed above is similar to the first approach.

Expectations for Positive Attributes. Structural models of personality contain implicit expectations for mature performance. Schaefer (1961) references a number of two-dimensional models from studies of personality that can be used to illustrate this point. The dimensions include love-
hostility and dominance—submission; introversion—extraversion and neuroticism or love—hostility; and high activity—low activity and approach—withdrawal. Schaefer points to the similarity of these and dimensions identified in other models. Labels such as love, extraversion, and approach imply positive behaviors, whereas hostility, submission, introversion, and withdrawal are negative. Thus competence can be defined theoretically as residing generally in a single quadrant although the labels given the dimensions may vary.

A similar approach is taken by Baumrind and Black (1967), whose factor analysis of Q Sort items produced four bipolar clusters positioned on a two-dimensional matrix. The clusters are as follows: Cooperative—Resistive, Affiliative—Disaffiliative, Assertive—Withdrawn, and Independent—Dependent. Although by implication the "positively" value-laden adjectives are expressions of competence, not until later (Baumrind, 1970) was there a formal definition of "instrumental competence" as behavior which is (1) socially responsible—friendly rather than hostile to peers, cooperative rather than resistive to adults, and achievement rather than non-achievement oriented; and (2) independent—dominant rather than submissive, and purposive rather than aimless. Baumrind supported this definition by referencing a study in which the positive attributes were ranked highly by middle-class parents (Emmerich and Smoller, 1964).

The location of competence on the circumplex has been explicitly related to psychoanalytic theory by Kohn and Rossman (1972a). An individual's way of coping with interpersonal conflict implies at least two kinds of polar opposites: active vs. passive and acceptable vs. unacceptable or friendly vs. hostile. Kohn and Rossman used these categories to describe interpersonal relations in the classroom, and "made the ...
assumption that the positive-active sector represents competent function-
ing and that the remaining three sectors represent three alternative types
of low-competent functioning" (p. 432).

Relationships with Other Variables. Competence can be defined empiri-
cally within a structural model by reference to correlations of factors or
item clusters (constructs) with other variables. Schaefer (1971) refers
to several unpublished studies which show that teachers' ratings of the
child's adjustment tend to be correlated with the two major dimensions
extracted in his own work plus a third factor referred to as Task Orienta-
tion, which includes perseverance and conscientiousness, vs. distractibility
and hyperactivity. Details of these studies and correlation values were
not provided. A plot of the conceptual space reportedly indicated that
child adjustment falls in the area defined by Extraversion, Low Hostility,
and Task Orientated Behavior.

Teacher ratings were used by Kohn and Rossman (1972a) to establish
concurrent validity of a social competency rating instrument based on
the psychoanalytic work described above and the structural model of
personality. Two major factors resulting from data collected on preschool
children were Use of Opportunity in the Classroom (interest, curiosity and
assertiveness) vs. Withdrawal from Opportunities (lack of interest and
inability to elicit cooperation of peers); and Conforming to Rules and
Routines (living within the classroom structure and complying with teacher
requests) vs. Nonconforming (defiance or creation of disturbances). Kohn
and Rossman reported these factors correlate positively with those identified
by Schaefer, Droppleman, and Kalverboer (1965) and Peterson (1961). Global
ratings by teachers of a child's level of functioning (a three-point scale
consisting of well, moderately well, and poorly functioning) correlated .63 with the first factor and .41 with the second factor. Ratings by teachers thus correlated more highly with the child's involvement than with cooperation and compliance to routines. The two social competency factors were predicted to correlate inversely with corresponding factors derived from ratings of behavior problems intended to uncover the major clinical symptoms children manifested in preschool or day care settings. Corresponding factors on the social competence instrument and symptom checklist correlated -.75 and -.79 as predicted, while noncorresponding factors were only modestly correlated.

Kohn and Rossman (1973) were also interested in the influence of social competence scores combined with demographic characteristics on concurrent cognitive functioning at the preschool level. In addition to their own social competency instrument, the Schaefer rating scale (Schaefer et al., 1965) was used as well to assess children's behavior in the classroom. A variety of cognitive instruments administered to children in the study produced factors associated with visual cognition, verbal expressiveness, motor control, and verbal cognition. Whereas demographic predictors, especially social class and race, influenced cognitive outcomes as expected, social-emotional variables as a group were more highly related to the cognitive outcomes than anticipated. The combined influence of demographic and social variables on cognition was roughly 2 to 2.5 times greater than the influence of either variable alone. The social-emotional variables which accounted for the greatest proportion of variance were Kohn and Rossman's Interest-Participation vs. Apathy Withdrawal and Schaefer's Task Orientation. Cooperation-Compliance vs. Anger-Defiance
was not related to cognition, i.e., "the extent to which the child did or did not observe the limits, rules, and norms of the classroom was relatively unrelated to cognitive functioning" (p. 288).

Analyses of the ability of social-emotional variables to predict later intellectual achievement have also been reported by Kohn and Rossman (1972b). Interest-Participation was positively correlated with the Metropolitan Readiness Test prior to school entry and with school achievement as measured by teacher ratings (top, middle, or bottom standing in the classroom) and the Metropolitan Achievement Test at the end of the first and second grade. These results are congruent with Kohn and Rossman's (1973) analysis of the influence of social-emotional and demographic variables on cognition measured in preschool. However, in this study an interesting pattern emerged differentiating boys from girls in the analyses of factor scores on social competence, on the symptom checklist, and pooled factor scores. Whereas none of the Cooperation-Compliance vs. Anger-Defiance scores was significantly related to achievement for boys, scores on the pooled factors were significantly related to achievement measures at the end of the second grade for girls. The nonpooled factor scores followed the same general pattern. Kohn and Rossman suggest that Anger-Defiant behavior precipitates an increasingly negative relationship with the teacher that becomes counter productive by second grade for girls but not for boys due to the greater acceptability of this pattern for boys.

Research on Direction of Change. Personality change or development in the structural model may be used to describe movement toward competence. Change is predicted between adjacent constructs on the circumplex (Foia, 1968) such that individuals are expected to move over time in a direction around the circumplex rather than through the intersection of the major
vectors. On the Becker and Krug (1964) model, for example, movement from Emotional Demanding to Assertive or to Defiant-Hostile is more probable than movement to Calm-Compliant, the bipolar opposite of Emotional Demanding.

Evidence for direction of change on the circumplex is reported by Emmerich (1971) in an investigation of the structure of personal-social behaviors as part of the ETS-Head Start Longitudinal study. Two rating scales applicable to preschool settings were developed to represent behaviors from a taxonomy of the personal-social domain, using constructs based largely on the Becker and Krug (1964) model. One of the scales was bipolar and assessed global personality dimensions; the other was unipolar and assessed more specific behaviors including social motives, coping mechanisms, and activities of interest. Median interrater reliabilities for the two instruments, respectively, were .63 and .74. A series of analyses to detect the structure of these data revealed two dimensions representative of the circumplex model and a third interpreted as Task vs. Person Orientation. Constructs identified on the circumplex resembled the Becker and Krug model. Eighteen constructs were reported, 10 on the circumplex, plus 5 for Task Orientation and three for Person Orientation. A general developmental trend was demonstrated from withdrawn to outgoing behaviors with major structural pathways through either the Compliant-Cooperative dimension, the Defiant-Hostile dimension, or the Task-Person dimension. Thus structural proximity seemed to govern change, although change seemed less likely to occur at the extremes of the Extraversion-Introversion axis on the circumplex.

Emmerich (1973) has speculated that competence may be defined in terms of change as contrasted with static location on the circumplex. A
child may be rated withdrawn at one time but actually be in process of change from withdrawn to outgoing, a transition that can only be detected with subsequent assessment. The same can be said of a child rated defiant-hostile. The sector on the circumplex toward which change is directed may vary among children, depending on their initial location on the circumplex.

Certainly not all individuals are in movement toward extraversion, and not all individuals need be outgoing to be socially competent. Expressions of goal directedness through interpersonal contacts do not necessarily imply a high rating on extraversion. Such expressions could occur only under conditions where the child sensed an urgent need to involve others in his activities as a pathway to goal attainment.

Movement may be more of theoretical than practical significance to the extent that averaged multiple ratings of personality dimensions over time predict future performance. Digman (1972) related high school achievement as measured by GPA to ratings of 11 personality traits gathered in the course of a longitudinal study. Summed ratings over a seven-year period for industriousness, a variable similar to Task Orientation as defined by Schaefer and Emmerich, when combined with SCAT scores received prior to high school entry correlated .91 with achievement. Whether competence is defined in terms of change or averages across time, the advantage is in gaining a broader representation of performance than is allowed by a single assessment.

In summary, competence can be defined in the structural model of personality based on implicit meanings of the labels used to identify constructs, correlations with criterion variables, or change in construct scores over time. Substantial evidence is available to warrant selecting Task Orientation vs. Inattentiveness as a prominent characteristic of
competent individuals based on research presenting correlations with other variables such as teacher ratings and subsequent achievement. Use of Opportunities in Classrooms vs. Withdrawal From Opportunities also seems to correlate positively with criterion variables, as does a similar construct, Extraversion vs. Introversion.

Social Interaction Theory

One of the key elements in the definition of competence offered at the opening of this paper was the process of expressing purposiveness in interpersonal contacts. This key element is addressed directly in the final approach to defining competence reviewed here. A functional model of what a competent person actually does while interacting with others emerges from the analysis.

Theory and Background

The essence of recent theories describing social interaction is the pursuit of interpersonal purposes. This is contrasted with the older "automatic unfolding of role reciprocity according to a normatively written script" (Weinstein and Deutschberger, 1963a, p. 454). Analyses of goal directedness emphasize the roles individuals enact, the lines of action they follow, and the response to be elicited from the other person pursuant to goal attainment, referred to as the interpersonal task. The central problem for a theory of social interaction is to explain the organization of lines of action followed as individuals pursue interpersonal tasks (Weinstein, 1966, 1969; Weinstein and Deutschberger, 1963a; 1963b; Wood, Weinstein, and Parker, 1967).

The roles an individual enacts or his lines of action in part determine the response of others. All participants select roles from their individual repertoires as a function of normative expectations for behavior
in the situation. Agreement must be reached implicitly or explicitly on the roles various individuals will enact if the interaction is to be maintained and the purpose of the interaction is to be achieved. Often negotiation is necessary prior to agreement in which individuals may call attention to personal characteristics that serve to establish their identity, may attempt to assign an identity to another, or attempt to withhold an identity by making it contingent on a line of action. If an individual successfully presents his identity, responses by others will follow appropriate lines of action for achieving his goals. Thus the individual has the double responsibility of pursuing goals and promoting or maintaining identities congruent with those goals.

**Definition**

Interpersonal competence is equated with skill at establishing and maintaining identities, whether for one's self or others. The psychological components that underlie the ability to maintain identities are as follows:

1. The ability to take the role of the other;
2. Possession of a varied repertoire of lines of action; and
3. Possession of intrapersonal resources to deploy effective tactics in situations where they are appropriate (Weinstein, 1969).

**Research on Components of the Definition**

Taking the role assumed by others has been investigated under various rubrics including role taking, empathy, person perceptions, and more recently social cognition. Social cognition refers to the child's "intuitive or logical representation of others, that is, how he characterizes others and makes inferences about others' covert, inner psychological experiences" (Shantz, in press, p. 1). Individuals vary in the degree to which they are capable of construing the actions and thoughts of others, and there is
evidently a developmental progression from lower to higher degrees of social
cognition. Ability to express this somewhat intuitive skill has been
interpreted within the framework provided by Piaget as a function of egocen-
trism vs. decenteration (Shantz, in press) or transpositional vs. trans-
formational thinking (Youniss, 1975). The importance of conceptualizing
empathy as a component of social competence is to bring this significant
research area from its current status as a developmental or epistemological
approach into the arena of applied concerns.

Possession of a varied repertoire of lines of action, the second
requisite for interpersonal competence, implies that an ineffective strategy
will be replaced by an individual with an alternative approach, and that
strategies must be selected appropriate to the rules governing social
interactions in the situation. Research by Spivak and Shure (1974) has
shown that the ability to name alternative strategies and to analyze the
consequences of rule violation are related to teacher ratings of classroom
adjustment. Poorly adjusted children provided a narrower range of solutions
and gave more irrelevant solutions. Ability to analyze consequences
predicted whether these children would be impulsive or withdrawn. Spivak
and Shure emphasize that interpersonal problem solving is unrelated to IQ,
scholastic test scores, or originality of thinking. A 12 week intervention
program with preschool children successfully influenced performance on
outcome measures, whether the program was presented by research staff or
by teachers.

Individuals may be able to analyze roles and may possess a variety of
interpersonal strategies but still be unable to employ them due to inadequate
intrapersonal resources. Examples are rigidity and rule boundness, aliena-
tion, ascription of consequences to forces outside one's own control,
excessive sensitivity to failure, and low self-esteem. Each of these may influence an individual to not utilize his skills in a situation, depending on how the situation or the others with whom one will interact are construed.

An alternative to viewing intrapersonal deficiencies as obstacles to competence is to view them as by-products of incompetence. Individuals whose competence is limited to trivial situations with actors considered by the person as not critical to the achievement of important goals may experience a variety of the characteristics described above as insufficient intrapersonal resources. Conversely, individuals whose competence is generalizable across situations will not suffer from such intrapersonal difficulties. This is more than a modest reinterpretation since intervention to elevate competency in the first view would be addressed to removing intrapersonal obstacles rather than to encouraging opportunities to express competence across a variety of situations considered important to the person. Self-esteem and locus of control as by-products of competence thus acquire behavioral referents that can be directly manipulated by instruction.

Implicit in this definition is the adaptiveness of goals formulated by individuals to the setting where they occur. Conceivably a person could be fully capable of assuming roles and expressing varied lines of action, yet not be considered competent because goals expressed are not those of a learner in classrooms. The adaptiveness of goals to settings and the process by which individuals acquire the ability to form adaptive goals have not been subject to investigation in this approach.

Overview and Conclusions

This review has identified three approaches to defining social competency associated directly with ongoing research on children. The first views competency in an ethological framework identifying adaptive interactions with adults and peers. The second defines competency within
a structural analysis of personal-social behavior as dimensions or clusters associated with task-oriented behavior and extraversion or use of opportunities in the classroom. The final approach highlights two requisites for purposive behavior stemming from social theory—the abilities to assume roles and to express varied repertoires pursuant to goal attainment.

Each research area is not without problems. For example, B. L. White's ethological approach is based on slight published information about interobserver agreement on the original criteria for identifying competent children from which the observation instrument was developed. Furthermore, the procedure for combining frequencies of observed behaviors into a total score can be attacked as seemingly arbitrary. Structural analysis of the personal-social domain identifies traits associated with competence that would be difficult to relate to situational determinants of behavior and only broadly describes the nature of underlying behaviors. Analysis of purposive behavior has focused on styles used to achieve interpersonal goals and very little on the mechanisms underlying competence or the adaptiveness of the purpose to the setting. Finally, all definitions presented here suffer from insufficient evidence of cross-cultural and sex-related generality.

The initial description of competence can nevertheless be reviewed in the light of research associated with the three approaches. Social competency was tentatively defined in the introduction as productive and mutually satisfying interactions between one child and peers or adults. Productive interaction were said to result in attainment of personal goals of the child, whether immediately or in the long run, which are adaptive to the classroom settings.
A modified view of competence emerges from the research in which terms such as purposiveness, adaptiveness, flexibility, and analysis are prominent. Purposiveness is stressed particularly in social theory but is also represented in Schaefer's (1971) Task Oriented vs. Inattentive Dimension, in Baumrind's (1970) Instrumental Competence, and in Ogilvie and Shapiro's (1970) attention seeking, utilizing resources, and competing for equipment and attention. Adaptiveness is stressed particularly in the ethological view but is also represented in social theory where the behavior must be appropriate in the context to be competent. In personality theory, the extent to which social interactions are viewed as adaptive to an adult is reflected in Use of Opportunity in the Classroom vs. Withdraw from Opportunity and to some degree in Conforming vs. Nonconforming, but the latter variable is nonpredictive of future cognitive functioning. Quite possibly deviations beyond set boundaries for behavior are not critical providing they are purposive and adaptive. Flexibility in the sociological analysis of interpersonal interaction is defined as a varied repertoire of interpersonal strategies pursuant to goal attainment. Finally, analysis of rules governing social interactions and of roles enacted are emphasized in the social analysis of competent behavior.

Research implied by the redefinition of competence focuses first on the extent to which data from the different perspectives reviewed tend to converge for constructs such as purposiveness, adaptiveness, flexibility, and analysis. A multitrait-multimethod matrix is one approach by which convergence and discriminant validity of different instruments to assess multiple constructs can be evaluated. Research on intrapersonal resources such as self-esteem and locus of control should be secondary to the analysis of behavioral characteristics and developmental trends associated with competence in different settings.
for children with varied backgrounds for each sex. A second line of research is to analyze the antecedents and consequences of behaviors comprising competence. Since much published information already exists addressing child rearing practices leading to behaviors discussed within the domain (e.g., Baumrind, 1967; Baumrind and Black, 1967; Fumerich, 1973; Schaefer, 1971; Shantz, in press; B. L. White et al., 1972), a review prior to initiating new research would be useful to highlight antecedents that influence competence. However, reviews of antecedents in socialization research generally produce modest consensus (e.g., Adkins, Payne, and O'Malley, 1974; Feshback, 1970; Mischel, 1970; Yarrow, Campbell, and Burton, 1968) and there is little reason to expect a difference here. Consequents of competence with particular criteria such as achievement could be analyzed using a predictive model including descriptions of settings, personality characteristics, and behaviors underlying purposive interactions. A final area of investigation is experimentation designed to produce competence. Analyses should be conducted of changes in competent interactions or in personal-social constructs contingent on environmental manipulation, and of the susceptibility of requisites for competence to experimental control. These approaches should bring us closer to an understanding of positive behaviors in classrooms and their significance for present and future contributions to social settings.
FOOTNOTES


2. The author is indebted for their helpful comments and suggestions on an earlier draft of this paper to Drs. Lois-ellin Datta and Irving Sigel.

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