In the research discussed in this paper, two major dimensions of social-emotional competence are identified, which are labeled Interest/Participation versus Apathy/Withdrawal, and Cooperation/Compliance versus Anger/Defiance. There is evidence of two environmental dimensions which set the stage for the two dimensions of social-emotional competence. These dimensions were designated by Stern as anabolic press, which deals with growth-promoting characteristics, and catabolic press, which has to do with stimuli designed to maintain a basic orderliness to the social process. The dimensions of social-emotional competence consist of two components—a person-specific component, roughly gauged by the extent of cross-situational stability and longitudinal persistence, and a situation-specific component, measured by the extent to which variations in the environment lead to increases or decreases in the specific dimensions of social-emotional competence.

Interest/Participation versus Apathy/Withdrawal is shown to be related to cognitive functioning and school achievement. School systems and teachers foster high social-emotional competence and at the same time create classroom settings which are optimal for learning. (Author/JM)
THE SOCIAL SYSTEMS MEANING OF THE TWO-FACTOR MODEL
OF SOCIAL-EMOTIONAL COMPETENCE

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Symposium
on
Dimensions of Competence in Classrooms

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Washington, D.C.
April 3, 1975
The title of our symposium is "Dimensions of Competence in the Classroom." I will speak about social-emotional competence by which I mean the constructive and destructive interactions between a child and other children in the class, the teacher and materials and objects. In the later part of my presentation I will discuss to what extent, if any, social-emotional competence is relevant to educational gains.

**Dimensions of Social-Emotional Interactions**

Two major dimensions of social-emotional interactions have frequently been identified by researchers. Peterson (1960, 1961) has noted that factor analyses of personality rating forms or personality questionnaires of children and adolescents have repeatedly yielded two major orthogonal (independent) dimensions which have frequently been called:

1. "Good versus Poor Adjustment" and "Introversion versus Extroversion" when the entire range of personality functioning was assessed (by entire range is meant both socially healthy and unhealthy or deviant behavior).

2. "Conduct problems" and "Personality problems" when deviant behavior
such as symptoms and problems were measured.

Peterson (1961) concluded that the generality of the two factor dimensions appeared to be "enormous" and stated, "Considering all studies together, age has varied from early childhood to adolescence; problem status has varied from none, through clinic attendance, to incarceration for delinquency; data sources have varied from case history records, to standard ratings, to questionnaire responses; methods of factor extraction have varied from cluster inspection to centroid analysis; rotational methods have varied from none, through visual shifts to both orthogonal and oblique solutions, to analytic techniques. Through it all the factors have stayed the same, and their definition at least seems adequate." (p. 206)

Rutter (1967) who reviewed the literature on childhood psychopathology came to the same conclusion. He stated, "Of all the distinctions made in child psychiatry, perhaps the most universal has been between "conduct problems" by which is meant anti-social or aggressive behavior and "personality problems" which refer to neurotic disorders." (p. 164) Similar conclusions were reached by Walker (1967), Digman (1963) and Schaefer (1971).

**Development of Social Competence Scale.** A similar two-factor model emerged in the course of a study on preschool children's social competence which my staff and I carried out. A major purpose of the study was to develop a teacher rating instrument designed to tap the unused resource of the teacher's knowledge of the children. We approached social competence in the classroom from the point of view of the child's relationship to people, objects and activities. In defining high and low social competence, we took the work of Chance (1959) as a starting point. Chance concluded that the way in which psychoanalytic theory describes the individual's manner of coping
with conflict suggests at least two kinds of polar opposites, namely, active versus passive and friendly versus unfriendly. She pointed out, "The combination of these two dimensions leads to four categories of behavior: positive-active, negative-active, negative-passive and positive-passive." (p.48)

Translated into children's classroom functioning, these four categories or sectors were seen as:

(a) friendly, active, interactive behavior
(b) friendly, passive, dependent behavior
(c) passive-resistive, withdrawn behavior
(d) bossy, hostile, domineering behavior

We used these categories as a convenient starting point for the description of interpersonal functioning in the classroom. We wrote an initial pool of 200 items and after putting the items through a series of screening procedures, there remained a list of 90 items.

**Data Collection and Subjects.** All children (N=407) in six New York City public day care centers were rated independently by the two full-time teachers in the classroom on the 90-item Social Competence Scale. Three of the centers had a predominantly white population and three a predominantly black population.

The subjects ranged in age from 36 to 70 months. The sample was about equally divided between boys and girls. Forty percent of the children were black, 43% were white, 14% were Puerto Ricans and 3% Orientals. Forty-nine percent of the children came from broken homes, mostly due to father absence. Slightly more than half (55%) of the heads of household had completed high school.

**Factor Analysis.** To determine the major dimensions of social competence, a factor analysis was carried out. Fifteen centroid factors were extracted
and six factors were rotated by means of Kaiser's (1958) normal varimax method. We decided to work with the first two factors only since they were the most powerful, accounting for 74% of the total communal variance. The remaining factors accounted for 10% of the variance or less.

Both factors were bipolar. To illustrate what is measured by the factors, the five items which show the highest positive loadings and the five items which have the highest negative loadings on each factor are presented in Table 1.

The positive Factor I items indicate interest, curiosity and assertiveness. The negative Factor I items indicate withdrawal, lack of interest and failure to elicit cooperation of peers in carrying out activities. We called this dimension, "Interest-Participation versus Apathy-Withdrawal."

The positive Factor II items indicate cooperation with rules and regulations, being neat and orderly and complying with the teacher's requests and suggestions. The negative Factor II items indicate defiance, disruptive behavior, being aggressive and hostile to other children and upsetting classroom procedures. We called this dimension, "Cooperation-Compliance versus Anger-Defiance."

The reliability between pairs of teachers, as corrected by the Spearman-Brown formula, was .77 and .80 for Factors I and II, respectively. The correlation between the scores on the two factor dimensions was .33, somewhat higher than desirable but low enough to indicate that the two factors measure discriminably different dimensions of functioning.

One of the advantages from the point of view of relevance to education is that we wrote the items of the Social Competence Scale in such a way that they did not describe abstract traits of personality but rather assessed how the children behaved in the classroom.

The two dimensions of social-emotional functioning which emerged from
the factor analysis made it plausible to hypothesize that Factor I describes the extent to which the child utilizes the opportunities available in the classroom. Thus, the child who scores high on this dimension participates and is involved in classroom processes and obtains satisfactions appropriate to a preschool setting through positive interactions with peers and activities. The child who scores low on this dimension withdraws from these opportunities and does not engage in constructive peer group interactions.

Inspection of the Factor II items shows that they deal with conforming to the rules, regulations and routines of the classroom. Thus, the child who scores high on this dimension is able to live within the classroom structure, accept the teacher's suggestions and adhere to the rules of social living. The child who scores low on this dimension is disruptive, aggressive and defiant and unable to adhere to the rules of social living.

Center-to-Center Differences in Percentage of Disturbed Children. A coincidental result from the study in which we developed the Social Competence Scale was our finding of the existence of large environmental effects: our data showed enormous differences among the six day care centers in the percentage of disturbed children. We defined as disturbed, the children who received extreme scores on the negative pole of the dimensions, namely, Apathy-Withdrawal and Anger-Defiance. The results are presented in Table 2.

It may be seen that there is enormous variability from one center to the next. The percentage disturbed on the Apathy-Withdrawal syndrome varies from 16% in the center with the lowest prevalence rate to 32% in the center with the highest prevalence rate. The magnitude of the difference is even greater for Anger-Defiance; the percentage disturbed varies from 5% in the center with the lowest prevalence rate to 50% in the center with the highest
prevalence rate. Here the difference is a tenfold one.

We set out to determine whether these large center-to-center differences could be accounted for by variations in the children's background. We had extensive background data on such variables as race, ethnicity, sex, social class, family intactness, size of family, etc. However, collectively these variables accounted for only a small proportion of the variance.

Since background variables could not explain the degree of variation, it was natural to ask whether environmental differences could account for the center-to-center variabilities and if so, what was the nature of the environmental differences?

**Dimensions of the Environment**

Stern (1970), in his analysis of college environments, found evidence of two major environmental dimensions. Following Murray (1938), he made a distinction between "needs" and "press." Need is a characteristic of individuals and refers to drives, wishes, motives, etc. Press, on the other hand, is a characteristic of situations, social systems or subcultures and refers to resources, opportunities, pressures by others and expectations of others, all of which influence and help to shape the behavior of the individual.

Stern found evidence for two classes of press which he called, for better or worse, "anabolic" and "catabolic." Anabolic press represents those characteristics of the social system which are potentially conducive to self-enhancing growth. Catabolic press, on the other hand, includes stimuli designed to maintain the orderly functioning of the system; Stern hypothesized these to be antithetical to personal development and likely to produce countervailing responses.

It is my impression that to say that constraints are necessarily
antithetical to personal development is to have prejudged the issue. In my view, the two-factor model of the Social Competence Scale as well as Stern's own findings and the research of others, to be cited briefly, permit a different, and perhaps more helpful, formulation.

Components of the Social System. We start with the premise that each social system, to be viable, must have two major components:

1. The system must provide opportunities for satisfactions and environmental supports and means to put these satisfactions within the reach of its members. In a preschool classroom, those satisfactions are play, learning, mastery, joyful interactions with others; the environmental supports and means are the richness of the setting and the willingness of the teacher to let the children experiment, to encourage and lend support to their efforts, to make the wherewithal for achieving satisfactions available to them.

2. Social systems can vary from absolute chaos to dictatorial control of every move. For a system to be viable, it must operate somewhere within these extremes. This second component has to do with the orderliness of the system, with the establishment of certain basic rules, routines and procedures so that it is not necessary to expend endless effort on the negotiation of transactions of secondary importance such as 'who is to sit where?' or 'What are the procedures on a given day for terminating activities?' etc.

A number of studies carried out at different laboratories have shown that analyses of social systems yield dimensions strongly suggestive of these two components. For example, Roff (1949) did a factor analysis of parent behavior as measured by the Fels Behavior Rating Scale (Roff was speaking of parent behavior as it applies to young children). The factor loadings
of the first two unrotated factors are shown in Table 3; it can be seen that
Factor I measures dimensions which can be subsumed under Stern's anabolic
model, that is, as promoting growth and enhancing the self:

Duration of contact
General babying
Child centeredness
General protection
Intensity of contact
Acceptance
Rapport
Affectionateness

On the other hand, Factor II measures dimensions related to the catabolic
system-maintenance aspects of diadic relationships:

Democracy
Justification of policy
Readiness of explanations
Non-coercion
Clarity of policy

The scales subsumed under Factor II do not deal so much with what the norms,
rules, etc. are as with the manner in which they are enforced, that is,
whether it is done in a democratic way, whether a policy is justified and
explained and whether the policy is clear and non-coercive.

Since we would like to fashion the social and educational climates in
classrooms so as to maximize children's competence, it is important for us
to focus on studies of the relationship between social-emotional competence
and the environment.

Relationship Between Dimensions of Social-Emotional Interactions and Dimensions
of the Environment

Study of Home Environment. Hewitt and Jenkins (1946) carried out a study
which dealt with the parent-child relationship. As Eysenck (1970) pointed
out, this is one of the few studies to apply the factorial method both to
behavior and to environment and to link the factors derived from the one to
the factors derived from the other.

The data for the study came from the case history records of 500 problem children whose average age was between 11 and 12. Forty-five traits were taken from the case histories and a modified cluster analysis was performed. Three clusters were found:

1. "Unsocialized aggressive" behavior, made up of the following traits: cruelty, defiance of authority, malicious mischief, inadequate guilt feelings, initiating fighting, assaultive tendencies.

2. "Socialized delinquent" behavior, made up of the following traits: gang activities, cooperative stealing, truancy from home or school, staying out late at night.

3. "Overinhibited" behavior, characterized by seclusiveness, shyness, apathy, worrying, sensitiveness, submissiveness.

The first cluster is very similar to what on the Social Competence Scale is called Anger-Defiance; the third cluster is remarkably reminiscent of Apathy-Withdrawal. The second cluster is of lesser interest here since it consists of behavior that is found across, rather than within, such specific social systems as the home or the classroom.

Three situational patterns were identified by the same procedure (cluster analysis):

1. "Parental rejection," made up of the following items: post-delivery rejection by mother and father, mother unwilling to accept parent role, mother openly hostile to child.

2. "Parental negligence," made up of items such as: irregular home routine, lack of supervision, discipline too lax or harsh.

3. "Parental repression," made up of items such as: father hypercritical, mother demanding, father or mother unsociable.
As a next step, Hewitt and Jenkins turned to a test of their major hypothesis, namely, "Children who differ from each other in expressing fundamentally different patterns of behavior maladjustment must have experienced fundamentally different patterns of environmental states; and conversely, children who are exposed to such fundamentally different patterns of situations will exhibit fundamentally different patterns of maladjustment."

Evidence in support of the hypothesis can be found in Table 4 which contains correlations between the three clusters representing child behavior and the three clusters representing situational patterns. It is certainly striking to observe the degree to which parental rejection is associated with unsocialized aggressive behavior, parental negligence with socialized delinquent behavior and parental repression with overinhibited behavior (also included in the table is a fourth pattern, physical deficiency, which shows a striking correlation with overinhibited behavior).

Parental repression probably represents the negative side of Stern's anabolic dimension, providing little opportunity or encouragement for personal development. It is less clear whether parental rejection is related to the negative side of the catabolic dimension of system-maintenance. It probably represents the complete failure of a meaningful social system to develop and therefore the absence of system-maintaining home processes.

Study of Classroom Environment. One of the few studies in which the relationship between child behavior and the environmental dimensions of the classroom has been analyzed was carried out by Prescott and Jones (1967). Prescott and Jones selected 50 day care centers which were a representative sample of all day care centers in Los Angeles County. In each center, 20-minute observation periods of teacher behavior were systematically rotated among each of the classrooms in the center. The 20-minute
observation of teacher behavior was the basic instrument of data collection. I cannot in a few minutes present the richness of the coding categories which these dedicated observers applied to teacher behavior. To give a brief overview, the categories included: encouragement, supporting-extending, approval-nurturance, teacher-suggestion, teacher-approval, guidance.

A factor analysis using a principal components selection disclosed four patterns of teacher behavior. Of interest for the present paper are only the first two factors which in any case accounted for the major proportion of the variance.

The first factor or Pattern I was labeled by Prescott and Jones "Encouragement versus Restriction." This pattern was the strongest and was definitely bipolar. "The factor appears to describe the alternative ways in which teachers respond to the feelings and behavior of children. Those teachers who accept and elaborate on children's behavior account for high positive loadings on encouragement and on lessons in consideration and creativity." (p. 117) The negative pole on this factor loaded high on teacher behavior dimensions which emphasize restriction, control and restraint. As Prescott and Jones put it, these behaviors characterize teachers "who respond repressively to children's feelings and behavior." (p. 118)

The similarity of this pattern to Stern's anabolic dimension is very clear. Also noteworthy is the similarity of the negative pole of this dimension to the parental repression pattern described by Hewitt and Jenkins.

The second factor which Prescott and Jones called "Conformity to Routines" appears to reflect the extent to which a teacher is concerned with enabling individual children to adapt to the routines of social living. There is high emphasis on guidance, structuring and teacher direction.
Conformity to Routines was a unipolar dimension. The similarity of this pattern to Stern's catabolic dimension is obvious. The unipolarity very likely derives from inadequate sampling of behaviors suggesting neglect and rejection. The absent negative pole is probably what Hewitt and Jenkins measured in their parental rejection syndrome.

In addition to the variables measuring teacher behavior, Prescott and Jones collected information on four other major variables, only one of which is of interest for present purposes. Prescott and Jones called this variable, "Children's Response"; actually, the five-point scale could be described more aptly as measuring the children's interest and involvement since a low score was indicative of disinterest, boredom, restlessness and lethargy and a high score denoted exceptional involvement and genuine interest in the activities of the classroom. The dimension is analogous, in a rough global way, to the Interest-Participation versus Apathy-Withdrawal dimension of the Social Competence Scale.

This variable was found to be strongly related to Teacher Pattern I, the Encouragement versus Restriction dimension; the correlation was $r = .70$. The findings, therefore, lend support to the hypothesis that the social climate of a classroom and the teacher's style of enacting the curriculum are strong determinants of children's social-emotional competence. The findings also confirm our conviction that social climate is not unidimensional.

The interest-disinterest variable was found to be only mildly related to Teacher Pattern II, the Conformity to Routines dimension; the correlation was $r = -.29$. Thus, the two dimensions have appreciably different impact on children's functioning: the results suggest that strong emphasis on the rules of social living has only a mildly inhibiting effect on the interest-disinterest dimension whereas children's involvement, interest and participation
can be fostered in a climate which optimizes opportunities for growth and ego-actualization.

Similar conclusions on the influence of climate on children's functioning can be drawn from the work of Lewin, Lippitt and White (1939) on social atmosphere and of Anderson (1939) on the integrative versus dominative approach. Anderson, for example, found that when the teacher's approach was dominative, the children tended to act in a dominative way toward each other. When the same group of children subsequently had another teacher whose approach was integrative, the children's behavior toward each other was integrative.

Recapitulation

To summarize the presentation so far: Two major dimensions of children's functioning have been identified repeatedly by many investigators over the last 50 years. In the Social Competence Scale which we developed to measure children's functioning in a preschool environment, we also found evidence of these two major dimensions. Our items were written in such a way that the dimensions did not describe abstract traits of personality but rather assessed how the children functioned in the social system of the classroom.

All this evidence suggested the existence of two major dimensions of the environment which would account for and set the stage for the two major dimensions of individual functioning. A brief review of the literature showed that two such major dimensions have indeed been identified in a number of studies. Stern called them anabolic and catabolic - the former relating to growth-promoting and enhancing of the capabilities of the individual, the latter relating to system-maintenance aspects. In addition, we found evidence in the work of Prescott and Jones that one environmental dimension, which
they called Encouragement versus Restriction and which seemed to correspond to Stern's anabolic dimension, was highly correlated with children's interest-disinterest.

Thus, it is reasonable to conclude that when we assess social-emotional competence in a classroom, the scores that we obtain will to some unknown but probably appreciable degree reflect the social climate in a classroom. We will call this the "situation-specific" component of social-emotional competence. However, we believe that the scores are also composed of a "person-specific" component which reflects the more or less enduring attributes of the individual. Evidence for this person-specific component comes from a number of different studies including our own work in which we have shown moderate cross-situational (Kohn and Rosman, 1973) and longitudinal stability (Kohn and Rosman, 1972) of the two major factor dimensions.

**Person-Specific Component of Social-Emotional Competence**

Further evidence with regard to the person-specific factor comes from a recently completed five-year longitudinal study in which we followed a group of children enrolled in New York City day care centers to the fourth grade of elementary school. To ascertain the extent to which children with either severe disturbance or a high level of health during the preschool period maintained their level of functioning five years later, we took the 25% of children who were most disturbed and 25% of children who were least disturbed and determined to what extent they were still in the high or low groups five years later.

The data are shown in Table 5 and indicate that: of the children high on Interest-Participation during the preschool period, 33% are still high on Interest-Participation five years later; on the other hand, 16% of the
children have become disturbed and are high on Apathy-Withdrawal five years later. Conversely, of the children high on Apathy-Withdrawal during the preschool period, 35% are still high on Apathy-Withdrawal in the fourth grade in contrast to 12% who now score at the other end of the dimension and are now high on Interest-Participation.

The same pattern is true of the Cooperation-Compliance versus Anger-Defiance dimension: of the children high on Cooperation-Compliance, 46% are still high on Cooperation-Compliance five years later in contrast to 13% who are now high on Anger-Defiance. Conversely, of the children high on Anger-Defiance during the preschool period, 41% are still high on Anger-Defiance in the fourth grade while 14% are now high on the other end of the dimension, Cooperation-Compliance.

Thus, over a five-year period of time the children had a tendency to maintain a stable level of functioning, even though they were assessed in different school settings - day care versus elementary school - and by different teachers.

What conclusions can be drawn regarding the level of social-emotional competence which we may find in any given classroom? Suppose, for example, we note that the children in a specific classroom are, on average, high on Apathy-Withdrawal; this may arise from two sources: either we are dealing with a very disturbed group of children or with a very dull, unstimulating classroom environment, or both. We certainly cannot conclude unequivocally that because most of the children show disturbed behavior, we are dealing with a group of very disturbed children.

Social-Emotional Competence and Achievement

In recent decades there has been an ever increasing emphasis on the school's
role in the child’s personality development. Barbara Biber and her colleagues (1961) have emphasized the role of the school as second in importance only to that of the home in influencing the development of the child’s personality. Stallings (1974), in her evaluation of follow-through programs, has pointed out that "follow-through sponsors and educators in general feel that the development of basic skills is important, but in addition to reading and computing it is desirable for children to develop such attributes as task persistence, attending ability, cooperation, inquiring, initiative and independence."

Stallings’ point of view implies that educational goals such as verbal or arithmetic achievement, on the one hand, and social competence goals such as initiative, curiosity and assertiveness, on the other, are both valued educational objectives. This point of view suggests that these goals are of equal worth but fails to take into account the relationship that may exist between them.

Research carried out by my staff and I indicates that there is a close association between social competence and achievement. In a number of different studies conducted over the past five years, we have found moderate but consistent correlations between social competence and achievement (Kohn and Rosman, 1972, 1973).

At the preschool level we found that children who scored high on Interest-Participation scored significantly higher on a variety of cognitive tasks, both of a verbal and non-verbal nature, than children with low scores on this dimension. On the other hand, a child’s score on the Cooperation-Compliance versus Anger-Defiance dimension appeared to be completely unrelated to cognitive functioning.

The Interest-Participation versus Apathy-Withdrawal dimension of
social-emotional competence was also found to have predictive significance for later school achievement. The child who was high on Interest-Participation during the preschool period gained more from his education in the elementary school years than a child who was high on Apathy-Withdrawal. Again, Cooperation-Compliance versus Anger-Defiance seemed to be completely unrelated to academic attainment during the first four years of elementary school.

Correlation does not imply causation and a wide variety of conclusions can be drawn from the association between Interest-Participation and achievement. For the present purpose, I would like to stress two hypotheses that we have formulated:

1. The child who scores high on Interest-Participation learns more from his environment because of his curiosity, assertiveness and high rate of social interacting; the child high on Apathy-Withdrawal learns less from his environment because of his diminished contact with environmental stimuli and low rate of social interaction.

2. Children high on Interest-Participation are mentally more alert and more likely to engage in active thought processes such as hypothesis formulation and testing, attention, discrimination, etc. Apathetic-withdrawn children are mentally more inert and less inclined to make sense about what goes on around them; in fact, they may avoid thinking.

The educational milieu can influence the situation-specific component of social competence which, in turn, can have an appreciable effect on the more traditional educational goals of scholastic achievement. The educational milieu can enhance curiosity, assertiveness, social interactions and interaction with material - categories of behavior which fall into the domain of social-emotional competence - and these behavior traits will, in turn, enhance learning and educational gains. These formulations suggest that learning is
not necessarily directly nor solely linked to the quality of the educational milieu; rather, the learning process may be facilitated by one or more specific dimensions of social-emotional competence.

Summary

The gist of this paper will now be summarized briefly:

1. We have identified in our research two major dimensions of social-emotional competence which we have labeled:
   ... Interest-Participation versus Apathy-Withdrawal
   ... Cooperation-Compliance versus Anger-Defiance

These same two dimensions have frequently been identified by other researchers (though given different labels) and the generality of this two-factor model appears to be enormous.

2. There is evidence of two environmental dimensions which set the stage for the two dimensions of social-emotional competence. These dimensions were designated by Stern as anabolic press, which deals with growth-promoting characteristics, and catabolic press, which has to do with stimuli designed to maintain a basic orderliness to the social process.

3. The dimensions of social-emotional competence consist of two components - a person-specific component, roughly gauged by the extent of cross-situational stability and longitudinal persistence, and a situation-specific component, measured by the extent to which variations in the environment lead to increases or decreases in the specific dimensions of social-emotional competence.

4. One of the two dimensions of social-emotional competence, namely, Interest-Participation versus Apathy-Withdrawal, has been shown to be related to cognitive functioning and school achievement.
5. Under favorable circumstances, we hypothesize a sequence of events, as follows:

a. Enhanced educational milieu, specifically along the anabolic dimension, leads to ....

b. Increase in Interest-Participation (that is, curiosity, assertiveness and initiative), which leads to ....


In other words, school systems and teachers who foster high social-emotional competence at the same time create classroom settings which are optimal for learning.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor I</th>
<th>Factor II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child gets others interested in what he's doing</td>
<td>0.83</td>
<td>0.01</td>
</tr>
<tr>
<td>Child manifests interest in many and varied types of things</td>
<td>0.83</td>
<td>-0.12</td>
</tr>
<tr>
<td>Child displays enthusiasm about work or play</td>
<td>0.82</td>
<td>-0.21</td>
</tr>
<tr>
<td>Child can give ideas to other children as well as go along with their ideas</td>
<td>0.82</td>
<td>-0.20</td>
</tr>
<tr>
<td>Child is able to express his own desires or opinions in a group</td>
<td>0.82</td>
<td>0.07</td>
</tr>
<tr>
<td>Child has difficulty getting the attention of the group</td>
<td>-0.80</td>
<td>0.02</td>
</tr>
<tr>
<td>Child demonstrates little interest in things and activities of his environment</td>
<td>-0.79</td>
<td>0.13</td>
</tr>
<tr>
<td>Child fails to secure cooperation when he has to direct activities</td>
<td>-0.77</td>
<td>0.15</td>
</tr>
<tr>
<td>Child is at a loss without other children directing him or organizing activities for him</td>
<td>-0.76</td>
<td>0.07</td>
</tr>
<tr>
<td>Child spends times sitting around, looking around, or wandering around aimlessly</td>
<td>-0.74</td>
<td>0.26</td>
</tr>
<tr>
<td>Child cooperates with rules and regulations</td>
<td>0.28</td>
<td>0.79</td>
</tr>
<tr>
<td>Child responds with immediate compliance to teacher's directions</td>
<td>-0.13</td>
<td>0.73</td>
</tr>
<tr>
<td>Child is able to accept teacher's ideas and suggestions for play or ways of playing</td>
<td>0.42</td>
<td>0.64</td>
</tr>
<tr>
<td>Child makes transition from one activity to the next easily</td>
<td>0.28</td>
<td>0.62</td>
</tr>
<tr>
<td>Child puts things away carefully</td>
<td>0.32</td>
<td>0.60</td>
</tr>
<tr>
<td>Child disrupts activities of others</td>
<td>-0.19</td>
<td>-0.86</td>
</tr>
<tr>
<td>Child expresses open defiance against teacher's rules and regulations</td>
<td>-0.08</td>
<td>-0.84</td>
</tr>
<tr>
<td>Child is hostile and aggressive with other children (teases, taunts, bullies, etc.)</td>
<td>-0.01</td>
<td>-0.84</td>
</tr>
<tr>
<td>Child tries to prevent other children from carrying out routines</td>
<td>-0.11</td>
<td>-0.82</td>
</tr>
<tr>
<td>Child quarrels with other children</td>
<td>0.00</td>
<td>-0.80</td>
</tr>
</tbody>
</table>
### TABLE 2

**PREVALENCE OF APATHY-WITHDRAWAL AND ANGER-DEFIANCE IN SIX DAY CARE CENTERS**

<table>
<thead>
<tr>
<th>Center</th>
<th>N</th>
<th>Apathy-Withdrawal</th>
<th>Anger-Defiance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center 1</td>
<td>62</td>
<td>16%</td>
<td>5%</td>
</tr>
<tr>
<td>Center 2</td>
<td>53</td>
<td>25%</td>
<td>19%</td>
</tr>
<tr>
<td>Center 3</td>
<td>72</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Center 4</td>
<td>94</td>
<td>26%</td>
<td>11%</td>
</tr>
<tr>
<td>Center 5</td>
<td>50</td>
<td>32%</td>
<td>50%</td>
</tr>
<tr>
<td>Center 6</td>
<td>76</td>
<td>21%</td>
<td>28%</td>
</tr>
<tr>
<td>All centers combined</td>
<td>407</td>
<td>22%</td>
<td>19%</td>
</tr>
</tbody>
</table>
### TABLE 3
UNROTATED FACTOR LOADINGS
FOR THE
FELS PARENT BEHAVIOR RATING SCALES*

<table>
<thead>
<tr>
<th>Scale Name</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor I</strong></td>
<td></td>
</tr>
<tr>
<td>Duration of Contact</td>
<td>68</td>
</tr>
<tr>
<td>General Babying</td>
<td>77</td>
</tr>
<tr>
<td>Child-Centeredness</td>
<td>84</td>
</tr>
<tr>
<td>General Protective ness</td>
<td>80</td>
</tr>
<tr>
<td>Solicitousness</td>
<td>72</td>
</tr>
<tr>
<td>Intensity of Contact</td>
<td>69</td>
</tr>
<tr>
<td>Acceptance</td>
<td>86</td>
</tr>
<tr>
<td>Rapport</td>
<td>80</td>
</tr>
<tr>
<td>Affectionateness</td>
<td>79</td>
</tr>
<tr>
<td><strong>Factor II</strong></td>
<td></td>
</tr>
<tr>
<td>Democracy</td>
<td>81</td>
</tr>
<tr>
<td>Justification of Policy</td>
<td>83</td>
</tr>
<tr>
<td>Readiness of Explanation</td>
<td>78</td>
</tr>
<tr>
<td>Non-coerciveness</td>
<td>79</td>
</tr>
<tr>
<td>Understanding</td>
<td>68</td>
</tr>
<tr>
<td>Clarity of Policy</td>
<td>68</td>
</tr>
</tbody>
</table>

* Adapted from Roff (1949)
TABLE 4
CORRELATION OF SITUATIONAL PATTERNS WITH BEHAVIOR SYNDROMES*

<table>
<thead>
<tr>
<th>Situational Patterns</th>
<th>Unsoc. Aggressive Behavior N = 52</th>
<th>Soc. Delinquent Behavior N = 70</th>
<th>Overinhibited Behavior N = 73</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Rejection</td>
<td>.48</td>
<td>.02</td>
<td>-.20</td>
</tr>
<tr>
<td>Parental Negligence</td>
<td>.12</td>
<td>.63</td>
<td>-.17</td>
</tr>
<tr>
<td>Parental Repression</td>
<td>.10</td>
<td>-.12</td>
<td>.52</td>
</tr>
<tr>
<td>Physical Deficiency</td>
<td>-.23</td>
<td>-.31</td>
<td>.46</td>
</tr>
</tbody>
</table>

* Adapted from Hewitt and Jenkins (1946), page 68
### TABLE 5

**CHILDREN HIGH ON INTEREST-PARTICIPATION, APATHY-WITHDRAWAL, COOPERATION-COMPLIANCE AND ANGER-DEFIANCE IN PRESCHOOL AND FIVE YEARS LATER**

<table>
<thead>
<tr>
<th>Grade 4</th>
<th>Preschool Interest-Participation Apathy-Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I-P 33%</td>
</tr>
<tr>
<td></td>
<td>A-W 16%</td>
</tr>
<tr>
<td>N = 323</td>
<td>Chi-square 16.70, p ≤ .01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade 4</th>
<th>Preschool Cooperation-Compliance Anger-Defiance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C-C 46%</td>
</tr>
<tr>
<td></td>
<td>A-D 13%</td>
</tr>
<tr>
<td>N = 323</td>
<td>Chi-square 36.14, p ≤ .01</td>
</tr>
</tbody>
</table>
REFERENCES


Kohn, M., & Rosman, B.L. A social competence scale and symptom checklist for the preschool child: Factor dimensions, their cross-instrument generality, and longitudinal persistence. Developmental Psychology, 1972, 6, 430-444.

-------------------------- Relationship of preschool social-emotional functioning to later intellectual achievement. Developmental Psychology, 1972, 6, 445-452.


RELATED REFERENCES


Kohn, M., & Rosman, B.L. A social competence scale and symptom checklist for the preschool child: Factor dimensions, their cross-instrument generality, and longitudinal persistence. Developmental Psychology, 1972, 6, 430-444.

Kohn, M., & Rosman, B.L. Relationship of preschool social-emotional functioning to later intellectual achievement. Developmental Psychology, 1972, 6, 445-452.


