

PERSONALITY INTEGRATION IN CHILDREN

by

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A Thesis Submitted to the Faculty of the

DEPARTMENT OF PSYCHOLOGY

In Partial Fulfillment of the Requirements  
For the Degree of

MASTER OF ARTS

In the Graduate College

THE UNIVERSITY OF ARIZONA

1963

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## I. INTRODUCTION

In the measurement of personality any attempt to assess the composition of the whole individual must include more than a summation of parts. It is well known that through the use of factor analysis correlational trends which run through a personality can be isolated and measured. These factors are of necessity statistically independent of each other. But a simple adding up or enumeration of these components does not permit an over-all composite picture of an individual. A person's actions do not denote his position along any one factorial dimension. Instead, his behavior reflects his own particular combination or integration of these factors. Observation of different persons suggests that in some the fusion of factors is harmonious while in others the combination seems incongruous.

The idea of the individual as an integral whole is accepted by most theorists, but it is conceptualized in many different ways. Cattell (1957), for example, thinks of personality integration as the extent to which behavioral expression and ergic drives of an individual are coordinated to a single goal. Jahoda (1958) speaks of integration as the relatedness of all processes and attributes of an individual and claims that many investigators propose it as a prime criterion of good or poor mental health. As examples she cites the

work of Hartmann (1939) and Kubie (1954) who think of integration as the inter-relation of certain areas of psychic forces, either the id, ego and superego as proposed by Hartmann, or the unconscious, preconscious and conscious levels as studied by Kubie.

Another approach to integration as discussed by Jahoda stresses the cognitive awareness by an individual of an underlying principle or outlook on life (Allport, 1955; Erikson, 1950; Maslow, 1950). To Allport, for example, a unifying philosophy of life is a sign of maturity, the presence of long range goals distinguishing the healthy from the sick personality. Maslow and Barron (1955) likewise speak of the healthy personality as one who possesses a unifying integrated outlook on life which consistently guides his actions and feelings. Ego integration is the crowning stage of personality development according to Erikson.

Still another approach to integration as a criterion of mental health is proposed by Jahoda. In this third viewpoint integration is regarded as the ability of an individual to withstand tension and resist stress. Some authors (Allinsmith & Goethals, 1956) feel that all humans have tensions. The difference in mental health lies not in the symptom but in the extent to which the individual's integrative forces are able to withstand these tensions.

Though the approaches to integration are many and varied, through them all there does seem to run a common denominator which

is usually referred to as some sort of consistency. This consistency likewise is conceptualized in different ways by different investigators. Defined motivationally, consistency, like integration, can be considered as the extent to which a person's actions are guided towards a common goal, the goal of greatest satisfaction. Or it might be thought of as the blending of group goals with individual action. Or the accent can be placed on the cognitive or perceptual aspects of consistency. In this last instance attention is directed towards the internal consistency of values and self concepts, or the consistency of beliefs with external reality. Finally, integration or consistency is often regarded simply as a lack of conflict or inconsistency.

In factor analytic research a factor that might be thought of as one of general integration or consistency seems to turn up continually. In the objective test realm, for example, there appears a factor which has been called Neural Reserves vs Neuroticism. And with questionnaires a factor termed Ego Strength vs General Emotionality has been discovered. But since no satisfactory operational method for measuring these components has been devised as yet, it is hard to determine whether one or both of these factors is strictly an index of general integration. It is important to note that this general factor of integration seems to appear at all age levels even though some theorists conceive of integration as depending on emotional maturity and thus not present in childhood. However, if integration is thought



of as the attainment of consistency in behavior or values of any sort, then we must realize that it can be present to some extent at all age levels. A child, of course, has less material to integrate because of his limited experience. And this fact distinguishes the child from the poorly integrated adult. A regressed psychotic, for example, may display the same amount of integration as a young child, but through his longer life he has also accumulated a wide array of additional unintegrated ideas and behavior which the child does not possess. Therefore, because of the nature of the age differences, it is impossible to compare people objectively at different developmental levels with regard to their degree of integration. The content of any index of integration must differ according to the amount and extent of integration expected at each developmental level. However, the rationale behind the measures and the operational method may be similar.

The present research is concerned with the measurement of personality integration in children. It represents an attempt to determine whether or not a normal child has a better organized, more consistent set of values than does a disturbed child. In other words, is there a significant difference in the logical consistency of values between children classified as functioning appropriately and those with behavior problems? If so, does this dimension correlate

highly with other factors or groupings of factors thought to differentiate between children with and without problems? Some researchers feel that answers to these questions might be resolved through the administration of so-called "projective" procedures such as the Thematic Apperception Test. This may be very true, but it is also the purpose of this research to determine whether or not it is feasible to measure the integration or consistency dimension in children using a more objective device.

In the past many measures have been suggested for the appraisal of integration, but in most instances these have been limited to research with adults. Every existent measure seems to have been confined to one particular facet of integration though it is assumed that each facet measured represents something more extensive and inclusive. Cattell (1957) argues that integration is a generalized property of personality and if the sampling of any facet of it is sufficient, it will represent the whole concept of integration, both dynamic and cognitive.

The measurement of motivational consistency, or the consistency between an individual's needs and his subsequent behavior, would seem to come closest to the popular conceptualization of integration. Theoretically, this measure would reflect the total amount of satisfaction derived from an act relative to the total amount of energy

expended. A lack of this sort of consistency might be thought of as the result of repression of strong motives and the subsequent permission of less basic and contradictory motives to become dominant. Behavior-need consistency is possible only when secondary drives lead to the satisfaction of more basic drives, and the contrast between conscious and unconscious drives is minimal. Therefore, consistency, viewed from this perspective, could measure the extent to which an individual's behavior patterns satisfy a number of needs at one time.

As yet it has not proved feasible to construct an instrument for the measurement of motivational consistency, although the use of projective devices as a means of uncovering unconscious motives has been considered. However, projective instruments present problems of their own as it is often difficult to ascertain the level of manifestation used by the subject in his stories and to keep the level of manifestation constant for all subjects. As an example, one subject might relate a true-to-life happening whereas the stories of another individual could reflect motives of which he is totally unaware.

A second means for assessing consistency might involve the use of Q-sorts to measure verbalized self concepts. Here a subject would be asked to sort self-evaluative statements about himself into five or six categories ranging from least to most applicable. This sort of measure has a popular appeal because of the ease of constructing the

scale items and its administration. But it is also susceptible to all of the difficulties inherent in measures which try to equate self perception with self report. Results well might reflect a tendency toward rigidity of response as much as they imply some form of integration. Even so, measures of consistency of self ratings and self sortings can provide indices which are relevant to personality integration.

But perhaps a stronger theoretical case can be extended for measures of ideational consistency. Two types have been devised, those pertaining to the consistency of ideas with external reality and those concerned with the logical or internal consistency of ideas, attitudes and values. A measure (M.I. 113, Acceptance of Reality Principle) designed to tap the first of these has run into interpretation difficulties and to date has revealed no clear evidence that it is a true measure of integration. Instruments involved in assessing the consistency of attitudes are also in the formative stage at both the child and adult levels. The original of these (Variable M.I. 327, Logical Consistency of Attitudes) was first designed for use with adults. It consisted of 23 syllogisms whose components were distributed through a longer questionnaire. Later, Coan constructed a child instrument of four syllogisms in which each of the syllogisms consisted of four items, the first premise being doubled. In this test the subject is forced to accept in each item a clear categorical choice which can be

related quite rigidly in terms of class inclusion to relevant choices in other items. Each first premise utilizes one of two alternative middle terms which the subject chooses in the second premise. As viewed schematically, the form contains four 2 choice items as follows:

First Premise: M A P/Q

N A P/Q

Second Premise S A M/N

Conclusion S A P/Q

Only one of the first premises enters into the scoring, the choice depending on the response to the second premise. Consistent patterns of response would be P-MP, Q-MQ, -PNP, -QNQ. The probability of responding consistently by chance is .5. An example of syllogisms used in Coan's research on six to eight year olds follows:

#### Syllogism D

1. Do you think people who do things slowly are (a) always careful and tidy or (b) sometimes a little careless and messy?
2. Do you think people who do things fast are (a) always careful and tidy or (b) sometimes a little careless and messy?
3. Do you (a) do things slowly or (b) fast?
4. (a) Are you always careful and tidy or (b) are you sometimes a little careless and messy?

Sixteen such questions were distributed over four sessions with only a single question from each syllogism being presented on each

occasion. With one point credited for each correct response the syllogism scale provides a five point scoring range from 0-4.

Preliminary findings from this test are quite tentative because the scale is so abbreviated. This measure seems most applicable to the determination of consistency between self-evaluation and the evaluation of others.

For child research Coan has also devised another type of logical consistency scale which seems to be a more flexible measure of the child's systems of values and attitudes. This measure he has referred to as the Hexad Consistency Measure. Coan claims that while the syllogism makes use of the transitivity of class inclusion, the hexad makes use of irreflexive transitive relationships. He feels that the hexad form lends itself to the construction of more palatable items since the subject is asked for a relative judgment, not a categorical one. In the Hexad Consistency Measure the subject ranks a set of elements by the method of paired comparison. Coan, in his initial presentation of this type of instrument, employed four hexads. Each used a main question and had four corresponding elements which were inserted in the question form in all possible pairs. This yielded six questions for each hexad. The four hexads originally employed by Coan are:

1. Which is better: \_\_\_\_\_ or \_\_\_\_\_ ?
  - (a) To do everything your father tells you to.
  - (b) To help your mother with the housework.
  - (c) To take care of a sick dog or cat.
  - (d) To help a blind man across the street.
2. Would you rather be: \_\_\_\_\_ or \_\_\_\_\_ ?
  - (a) The smartest child in the class.
  - (b) The strongest child in the class.
  - (c) A child everyone likes.
  - (d) The best looking child in the class.
3. If you had a dollar, would you: \_\_\_\_\_ or \_\_\_\_\_ ?
  - (a) Save it.
  - (b) Give it to a poor child.
  - (c) Buy some candy and ice cream.
  - (d) Buy a good book.
4. Which is worse: \_\_\_\_\_ or \_\_\_\_\_ ?
  - (a) A boy who gets into a lot of fights.
  - (b) A boy who tells lies.
  - (c) A boy who steals things.
  - (d) A boy who talks back to his mother.

Coan divided his total set of 24 questions into 3 one-session blocks. Two questions from each block were presented at each session, but the questions were so arranged that no hexad element

appeared more than once at any one stage. This was done to minimize the effect of reasoning and memory.

For each hexad there are 64 possible response patterns of which 24 are logically consistent, since there are 24 possible ordinal arrangements for four elements. There are 40 possible responses which are inconsistent.

Because of the limited number of hexads used in Coan's original child instrument it is of low reliability and the conclusions are only tentative. However, his work indicates that a measure of logical consistency of childrens' ideas, values and attitudes does tap integrative processes of some sort and additional inquiry might reveal more conclusive evidence. One aspect of the present research is concerned with further development of the Hexad Consistency Form as a possible means of measuring the consistency of values, attitudes and ideas in children with and without behavioral problems.

So far the discussion has been limited to the concept of integration as a vital ingredient in the assessment of a child's personality composition. But in all fairness, it is also essential to view integration in the light of some other information known about the personality structure of children. Cattell and Coan (1957a, 1957b, 1958, 1959) have been very active in the field of child research, having already accomplished much along the line of defining and measuring



personality factors in middle and late childhood. As part of their work, they have refined an Early School Personality Questionnaire (ESPQ) for use with children in the six to eight year level. In their research design Cattell and Coan used separate factorization in three realms of data: 1) questionnaire responses, 2) objective test results, and 3) behavior ratings by parents and teachers. From their investigations they conclude that the primary factor structure in children doesn't seem to be noticeably less complex than it is for adults. As a matter of fact, there is a striking resemblance between personality dimensions of adults and children both as to nature and number.

To date Coan and Cattell (1959) have isolated twelve stable, reproducible, personality factors in the questionnaire realm in middle childhood. At the time this research was concluded, a child's personality structure at the six to eight year level was thought to include the following factors:

Factor A: Cyclothymia vs Schizothymia

The high scorer is considered to be warm and sociable, the low scorer more cold and aloof. The extent to which a child responds favorably to his school and teachers is reflected in these scores.

Factor C: Ego Strength vs General Emotionality

Here the low scorer tends to lack frustration tolerance and has difficulty controlling his emotions, whereas the

subject scoring higher appears relatively calm, stable, and socially mature.

Factor D: Excitability

The high scorer tends to overreact to many kinds of stimuli and becomes distressed on slight provocation.

The low scorer might be thought of as emotionally placid.

Factor E: Dominance vs Submission

The high scoring child is more active, assertive, and aggressive while the low scorer is relatively docile.

Factor F: Surgency vs Desurgency

For the high scorer this scale indicates a tendency towards enthusiasm, optimism and self confidence. The low scorer is more serious and self deprecating. Research evidence points to the fact that the high-F child seems to come from a secure and affectionate family setting whereas the desurgent's home appears lacking in affectional display.

Factor G: Superego Strength

This scale reflects the extent to which a child has introjected the values not only of the adult world but the values relating to achievement in the school setting as well.

Factor H: Parmia vs Threctia

This, like Factor A, is a component of the extraversion-introversion continuum and indicates sociability. Whereas

the high-A person is sociable in a warm, emotional, feeling way, the high-H person is sociable as an interacting individual. The low-H person tends to withdraw from social situations, is easily threatened, and very sensitive.

Factor I: Premisia vs Harria

The high-I scorer is often sensitive because of parental overprotection and thus shows greater dependency. He fearfully avoids physical threats and sympathizes with the needs of others. In contrast the low scorer is more thick-skinned and independent.

Factor J: Coasthenia

Here the high scorer is more fastidious, individualistic, physically restrained and critical of others, while the low scorer expresses himself more freely, is more active and uncritical.

Factor N: Shrewdness vs Naivete

Among children the high-N individual seems to be wiser in the ways of adults and peers and thus is able to advance his own interests more easily than does the low scorer, though he isn't apt to appear more mature in other respects.

Factor O: Guilt Proneness vs Confidence

Manifest subjective distress is depicted by Factor O. In older groups this is the factor that best differentiates neurotics from the general population.

Factor Q4: Ergic Tension

The low end of the scale seems to reflect easy composure and relaxed sociability whereas the high scorer might seem to be nervously tense.

In the present research it has been important to consider this work of Coan and Cattell as background material for a more precise understanding of the whole topic of personality structure and the integration of personality in middle childhood. And whether or not ideational consistency in children is related to any of the primary factors or secondary groupings of factors has likewise been a prime consideration.

## II. RESEARCH HYPOTHESES

It was the aim of the present research to explore the issue of personality integration in children and to determine whether or not differing degrees of ideational consistency distinguish normal children from those with personality problems. The mental health of an adult would seem to rest, to some extent at least, on the strength of his integrative forces. If adults and children are similar in their personality structure, as has been proposed by Coan and Cattell, then it is possible to presume that mental health in a child is also somewhat dependent on the extent of the integration of his personality factors.

In this research the general theoretical proposition has been submitted that children without behavioral difficulties possess a more integrated personality structure than do children with problems of aggressiveness, withdrawal and tension/anxiety. The investigator agrees with Cattell's viewpoint that integration can be considered a generalized property of personality and assumes that a measure of ideational consistency does tap the integrative process. Therefore from the first general proposition a testable hypothesis has been deduced, namely that children possessing problems of aggressiveness, withdrawal and anxiety/tension either separately or in combination

have less ideational consistency than do children lacking these disturbances.

This hypothesis would seem to be readily measurable through the design and presentation of an extended and thus potentially more reliable version of Coan's original Hexad Consistency Test. To Coan's initial four hexads, therefore, the examiner added sixteen hexads appropriate for presentation to primary school children. A final hypothesis was then proposed that primary school children without behavioral problems can be expected to obtain significantly higher scores on the 20 item Hexad Consistency Measure than do those who have emotional problems in the areas of aggressiveness, withdrawal and anxiety/tension, either separately or in combination.

In order to illuminate these hypotheses, other bits of information were pursued through the simultaneous presentation of the more established Early School Personality Questionnaire. It was hoped that a relationship would be found between consistency scores and secondary factor groupings thought to differentiate individuals into diagnostic categories. Additional information was sought concerning connections between the consistency variable and other basic factors already differentiated in children. It was hoped that the information obtained about relationships between questionnaire factors and

categorical groupings of children might cast further light on the place and potentiality of the consistency measure.

### III. INSTRUMENTS USED

As has been discussed previously, the principal instrument used in this research was the Hexad Consistency Measure. The final test, totaling twenty hexads, included the four hexads originally designed by Coan plus 16 additional hexads originated by the author. In order to tap a broad scale of values and attitudes thought to be prevalent in six to eight-year-olds, different personality areas were approached by the instrument. Among them were the child's superego, his ego ideal, ego identity, ideal other, plus a mixed grouping. Four of the hexads attempted to tap the subject's superego (numbers 14, 15, 16, 17) and five his ego ideal (1, 2, 3, 4, 5). A third group centered around ego identity (8, 9, 10, 11) and the fourth area was that of ideal-other (6, 7). The fifth group was mixed (12, 13, 18, 19, 20).

The twenty hexads included in the original instrument are below:

1. If you had lived long ago would you rather have been: \_\_\_\_ or \_\_\_\_?
  - (a) A brave cowboy.
  - (b) A famous president.
  - (c) A rich man.
  - (d) A good doctor.



2. Would you rather be: \_\_\_\_\_ or \_\_\_\_\_ ?

- (a) The smartest child in the class.
- (b) The strongest child in the class.
- (c) A child everyone likes.
- (d) The best looking child in the class.

3. Would you rather: \_\_\_\_\_ or \_\_\_\_\_ ?

- (a) Act in a play.
- (b) Listen to stories.
- (c) Make things out of wood.
- (d) Take care of sick people.

4. Would you rather be: \_\_\_\_\_ or \_\_\_\_\_ ?

- (a) A grown person.
- (b) An older child.
- (c) Someone just your age.
- (d) A baby.

5. Which would be worse, to be: \_\_\_\_\_ or \_\_\_\_\_ ?

- (a) Too fat.
- (b) Too thin.
- (c) Too short.
- (d) Too tall.

6. Would you rather have a teacher who is: \_\_\_\_\_ or \_\_\_\_\_?

(a) Smart.

(b) Pretty.

(c) Fun.

(d) Friendly.

7. Would you rather have a friend who is: \_\_\_\_\_ or \_\_\_\_\_?

(a) Much older than you are (a grown person).

(b) Just a little older than you are.

(c) About your age.

(d) Younger than you are.

8. Which do you do better: \_\_\_\_\_ or \_\_\_\_\_?

(a) Play ball games.

(b) Read.

(c) Draw pictures.

(d) Sing.

9. Which is most like you, a child who is: \_\_\_\_\_ or \_\_\_\_\_?

(a) Neat.

(b) Funny.

(c) Brave.

(d) Kind.

10. Which bothers you most, if other children say you: \_\_\_\_\_ or \_\_\_\_\_?

- (a) Are bossy.
- (b) Are a tattletale.
- (c) Are messy.
- (d) Brag too much.

11. If your mother scolds you, which are you most likely to do:  
\_\_\_\_\_ or \_\_\_\_\_?

- (a) Cry.
- (b) Get mad.
- (c) Try not to listen.
- (d) Listen quietly.

12. Which would make you feel worse, if people thought you  
were: \_\_\_\_\_ or \_\_\_\_\_?

- (a) Selfish.
- (b) No fun to play with.
- (c) Stupid.
- (d) Babyish.

13. If you had a dollar, would you: \_\_\_\_\_ or \_\_\_\_\_?

- (a) Save it.
- (b) Give it to a poor child.
- (c) Buy some candy and ice cream.
- (d) Buy a good book.

14. Which is worse: \_\_\_\_\_ or \_\_\_\_\_ ?
- (a) A child who breaks a playmate's toy.
  - (b) A child who says naughty words.
  - (c) A child who is cranky.
  - (d) A child who doesn't obey his parents.
15. Which is worse: \_\_\_\_\_ or \_\_\_\_\_ ?
- (a) Arguing with your parents.
  - (b) Being messy at the dinner table.
  - (c) Playing after you have gone to bed.
  - (d) Not putting away your things.
16. Which is worse: \_\_\_\_\_ or \_\_\_\_\_ ?
- (a) A boy who gets into a lot of fights.
  - (b) A boy who tells lies.
  - (c) A boy who steals things.
  - (d) A boy who talks back to his mother.
17. Which is better: \_\_\_\_\_ or \_\_\_\_\_ ?
- (a) To do everything your father tells you to.
  - (b) To help your mother with the housework.
  - (c) To take care of a sick dog or cat.
  - (d) To help a blind man across the street.

18. If you should see a big boy hitting a smaller one on the playground, would you: \_\_\_\_\_ or \_\_\_\_\_?

- (a) Run away.
- (b) Try to stop him by yourself.
- (c) Get a friend to help you stop him.
- (d) Tell your teacher.

19. Would you rather: \_\_\_\_\_ or \_\_\_\_\_?

- (a) Help your mother cook dinner.
- (b) Help your dad take care of the yard.
- (c) Help your teacher after school.
- (d) Help your friend put away his toys.

20. If you should see a little dog hurt in the road, would you:  
\_\_\_\_\_ or \_\_\_\_\_?

- (a) Try to help it by yourself.
- (b) Ask a friend to help.
- (c) Try to get help from a grown person.
- (d) Run away.

As each hexad yields six questions, the final test consisted of 120 questions. For administrative purposes this was divided into six sections, each section including one question from each hexad. In this way memory and reasoning were less apt to influence the

subject's decisions. The order of alternatives was varied in such a way as to prevent response-set biases in scores.

Two equivalent forms of the Early School Personality Questionnaire were also administered. Each form contains measurements of the twelve personality scales described earlier, plus a thirteenth, intelligence (Factor B.). Except for minor revisions in two or three of the scales, the 160 questions presented in this research project were the same as those published in Coan's article on "The Development of the Early School Personality Questionnaire" (1959).

#### IV. EXPERIMENTAL PROCEDURES

Subjects for the experiment were drawn from the Amphitheater School District, Tucson, Arizona. Principals and teachers in three elementary schools, Prince, Wetmore and Harelson, were asked to select the children in their first and second grade classes who they thought had identifiable emotional difficulties. They were asked to classify these children into one or more of the following groups:

Area 1. Aggressive conduct against children and/or adults in positions of authority; disruptive, noncooperative behavior; fighting, quarreling, destructiveness.

Area 2. Withdrawal tendencies; shyness; preference for solitary activities.

Area 3. Anxiety, fearfulness, tenseness, nervousness; disturbed by internal conflicts or fears.

At the Prince School all of the first and second graders who did not fall into one of the above categories were placed in a group classified as nonproblem. Of the three schools used in this study, Prince School was chosen as the best source for this control group because of its location in an area populated by families thought to

represent a wide range of social and economic classes. By using a heterogeneous sample the investigator hoped to avoid contamination of test results by characteristics commonly associated with any one socio-economic class.

A few cases were lost from the present study through the absence of a child from one or more of the testing sessions. The final sample consisted of 164 subjects, ages 6-8 1/2. Of this total, 97 were classified as normal and 67 as problem children. There were 88 boys and 76 girls.

In subgrouping the problem children into the three diagnostic areas, 13 subjects were placed by their supervisors in more than one category. In these instances the teacher or principal felt that the child fitted equally well into both divisions. The final grouping of problem children consisted of 16 boys and 9 girls in Area 1, 16 males and 13 females in Area 2, and 16 males and 10 females in Area 3.

At the Harelson and Wetmore Schools the selected problem children were called out of their classes and tested in a special room arranged for the event. However, at Prince School, problem and nonproblem children were administered the tests together in their home rooms.



Questions from the two instruments, the Hexad and the ESPQ, were presented to the children over a period of five consecutive days. One section of the consistency test was presented each day, with the exception of the final day when two sections were given. These final sections were so arranged, however, that no more than one element from any hexad appeared in each presentation.

The 160 questions of the ESPQ were divided into four sections of forty questions each and presented along with the consistency measure on the first four of the five testing days. Thus a total of sixty questions was presented to the children on the first four days and on the final day, forty. Each session lasted thirty minutes or less. No more than 25 children were tested at one time. This allowed the investigator opportunity to observe the children closely, making certain they answered all questions. The testing time was kept short intentionally in an effort to maintain maximum attention on the part of the youngsters. The examiner found first graders squirming after the first few minutes of testing so "stretch" sessions were suggested after each block of twenty questions.

Because many of the children were beginning readers, all of the questions were presented orally by the investigator. For each set of twenty questions the child was given a scoring sheet on which there were twenty rectangular boxes arranged in two columns. At the

left in each rectangle was printed a large letter A and on the right a B. In the middle of each box an identifying symbol was drawn.

The symbols included in the first column were, consecutively, a star, circle, square, house, bird, flower, chair, cat, wagon and elephant. An airplane, rabbit, tree, bicycle, boat, cup, candle, hat, hammer, and car were contained in the second column. Each rectangular box was used for the response to one question.

A standard set of instructions was given the children at the start of each session. Scoring sheets were passed out and the scoring procedures explained. The children were told that they were going to be asked a number of questions and that each question had two possible answers, either answer A or answer B. The subjects were asked to cross out either the A or the B depending on their choice of answers. As each question was presented the examiner directed the children to the appropriate box by mentioning the symbol included in the center. For example, "In the box with the boat in the middle, please answer this question: Which is worse, A) arguing with your parents or B) being messy at the dinner table? If you think it is worse to argue with your parents, please cross out the A. If you feel that being messy at the dinner table is worse, then cross out the B." Similar instructions were repeated with each question.

### Scoring

For each hexad on the consistency measure a score of one was awarded if the subject followed a logically consistent pattern or a score of zero if the pattern was illogical. The total range of scores was 0 - 20. For any one hexad there are 26 or 64 possible responses of which 24 are logically consistent. Thus, by chance alone, out of twenty hexads a subject was able to obtain a score of 7.5.

The examiner was concerned about the effect position scoring might have on the total results of the consistency measure. There was a tendency for some of the children to mark out all of the "A's" or all of the "B's" on the scoring sheet without proper regard for the questions they represented, or to continuously crisscross the answers, ABABABAB etc. On any column of ten answers the average number of shifts back and forth from A to B is expected to be 4 or 5. All deviations from this expectation were recorded. For example, if a child marked his sheet, as was expected, by shifting 4 or 5 times between the A and the B answers (for example A, BB, AA, B, A, BBB) his position score was 0. But, if he decided to cross out the A's only, the difference between the shifts expected, 4, and the shifts he made, 0, was recorded. In this case the score was  $4 - 0 = 4$ . If, instead, he marked his score sheet in a crisscross fashion, ABABABABAB, shifting a total of 9 times, his score for this column

was the difference between the total changes, 9, and the nearest expected score of 5. Again, therefore, he received a score of 4.

The final position score for the subject was the sum of all the column deviation scores.

The ESPQ was scored according to standard directions suggested by its authors. Raw scores were converted into sten equivalents appropriate to the child's age category.

## V. TREATMENT OF DATA

In the initial working of consistency test data, analysis of variance was first applied to the consistency scores produced by the total normal and total problem populations. A rough check indicated homogeneity of variance existed between the two sets of data and a normal distribution of scores was assumed. The analysis, as shown in Table I, reveals a significant difference between the scores of these two major groupings of subjects at the .05 level. Examination of the mean scores for each of these groupings, as shown in Table II, discloses that the difference was in the right direction and in accord with the hypothesis that nonproblem children would obtain significantly higher scores on the Hexad Consistency Test than would problem children.

The investigator went on to examine consistency test data more specifically by breaking the problem and nonproblem groupings into additional sub-groupings identified by age and sex as well. For analytical purposes, subjects under 7 1/2 years of age were classified as "young" and those 7 1/2 or over as "old." This resulted in the following sets: young problem males, young problem females, old problem males, young normal males, young normal females, old normal males, old normal females. The original sample included

TABLE I  
ANALYSIS OF VARIANCE OF CONSISTENCY TEST DATA  
FOR TOTAL CONTROL AND TOTAL PROBLEM GROUPS

Source of Variation	SS	df	MS	F
Between Groups	66.45	1	66.45	6.56 *
Within Groups	1636.53	162	10.10	
Total	1702.98	163		

$$F_{95}(1, 162) = 3.84 \quad 6.56$$

$$F_{99}(1, 162) = 6.63 \quad 6.56$$

\*Significant at the 5 per cent level

TABLE II

MEAN SCORES FOR CONTROL AND PROBLEM GROUPS  
ON HEXAD CONSISTENCY MEASURE, POSITION SCORING,  
AND PERSONALITY FACTORS

Measurement Variables	Control Group	Total Problem	Area 1	Area 2	Area 3
Consistency Measure	12.04	10.82	11.20	10.43	11.26
Position Scores	34.51	38.22	32.24	42.93	36.66
Factor A	5.09	4.85	4.04	5.50	5.26
Factor B	4.74	4.55	4.84	4.30	4.37
Factor C	5.52	4.88	4.84	5.03	4.78
Factor D	5.00	5.46	5.52	5.10	5.22
Factor E	5.59	5.84	6.48	5.23	5.70
Factor F	6.58	6.55	6.64	6.37	6.59
Factor G	5.12	4.68	4.52	4.90	4.92
Factor H	5.60	5.20	5.32	5.37	5.30
Factor I	5.25	5.26	5.24	5.63	5.26
Factor J	5.50	5.96	6.04	6.03	5.74
Factor N	5.90	6.67	7.12	6.17	6.22
Factor O	5.25	5.55	5.40	5.40	5.18
Factor Q4	4.97	5.67	5.92	5.60	5.48

no females in the old problem category and thus the total number of groupings consisted of seven rather than eight areas.

Again, an analysis of variance applied to these seven groupings revealed a significant result at the .05 level. (Table III) Comparison of these seven groupings was then sought. Because the sample sizes were unequal the Newman-Keuls method for making tests on differences between all pairs of means was selected. Requirements for the Newman-Keuls test are that an over-all significant difference between the means must exist and that the n's should not differ markedly. Consistency test data adequately met these requirements.

The statistic used by Newman-Keuls in making these tests of the difference between all means is the studentized range statistic (cf. Winer, 1962, pp 101).

$$q_r = \frac{T_j - T_i}{\sqrt{ms/error/n}}$$

Here the r is the number of steps two means are apart on an ordered scale.

Results in Table IV indicate no significant difference in any of the 21 different comparisons of means. This outcome seems surprising considering the over-all significant difference obtained in the initial analysis of variance. It may indicate that age and sex variables do not influence consistency scoring as much as does emotional



TABLE III

ANALYSIS OF VARIANCE BETWEEN ALL MEANS ON  
 HEXAD CONSISTENCY MEASURE  
 (GROUPS ANALYZED FOR AGE, SEX, PROBLEM-NONPROBLEM  
 DIFFERENCES)

Source of Variation	SS	df	MS	F
Between Groups	132.86	6	22.147	2.2147 *
Within Groups	1570.10	157	10.000	
Total	1703.00	163		

$F_{95} (6, 157) = 2.15 \quad 2.2147$

$F_{99} (6, 157) = 2.91 \quad 2.2147$

\*Significant at 5 per cent level

TABLE IV

COMPARISON OF ALL PAIRS OF MEANS ON CONSISTENCY  
MEASURE USING STUDENTIZED RANGE STATISTIC -  
NEWMAN-KEULS METHOD FOR GROUPS WITH UNEQUAL "n's"

Groupings	Means	n
a. young problem males	10.83	23
b. young problem females	10.67	27
c. old problem males	10.76	17
d. young normal males	11.47	32
e. young normal females	12.48	27
f. old normal males	10.87	16
g. old normal females	13.18	22

  

Treat- ments	b	c	a	f	d	e	g
Means	10.67	10.76	10.83	10.87	11.47	12.48	13.18
b	10.67	.09	.16	.20	.80	1.81	2.51
c	10.76		.07	.11	.71	1.72	2.42
a	10.83			.04	.64	1.65	2.35
f	10.87				.60	1.61	2.31
d	11.47					1.01	1.71
e	12.48						.70
g	13.18						

  

	r 2	r 3	r 4	r 5	r 6	r 7
$q_{95}(r, 157)$	2.77	3.31	3.63	3.86	4.03	4.17
$\sqrt{MS_{error}/n} \cdot q_{95}(r, 157)$	1.86	2.21	2.44	2.59	2.70	2.80
$\sqrt{MS_{error}/n} = \sqrt{\frac{10}{22.18}} = \sqrt{.4508} = .671$						

adjustment. At least, evidence evinced thus far has failed to reveal that age and sex are significant contributing factors toward greater consistency of values and ideas in children.

However, examination of the mean scores for each of the seven grouping shows that they fall in the expected direction, with problem children producing lower scores on the Consistency measure than the nonproblem children. The normal females in this study were evidently somewhat more consistent, though not significantly so, regardless of age than were the normal males. But the difference between the mean scores of young problem males and old normal males is minimal. In contrast, the greatest difference is revealed between young problem females and old normal females. This might lead one to surmise that the Consistency measure more effectively differentiated problem and nonproblem females than it did problem and nonproblem males.

The results also reveal some evidence of interaction between the age and sex variables, in that average scores of males on the consistency measure tended to decrease with age whereas with females there was an increase. The experimenter finds difficulty offering an explanation for this interaction, although of some interest might be the fact that the boys tested, in general, were

less cooperative during the testing procedures than were the girls, with the older males being particularly inattentive.

It was also proposed that these unpredicted results might possibly have arisen from use of position scoring by the youngsters, but analysis of variance using the above seven groupings did not bear out this supposition as the F ratio was below the 5 per cent level of 2.15. (Table V)

### Reliability

In the initial tabulation of Consistency test data, scores for odd and even numbered questions were added separately and later summed. With this information a split-half reliability coefficient was computed and found to be .375 after correction by the Spearman-Brown formula. This result is far lower than was hoped for and reflects the difficulty inherent in creating reliable measures of childrens' personality at early age levels. Of course, it must be realized that the investigator deliberately included in the Hexad measure items of different content in order to tap broad areas of the subjects' personalities. No attempt was made to construct a test with high internal consistency. The effect of this, as reflected in the results thus far, insured some validity at the expense of internal reliability. But the examiner was willing to assume the risk in an attempt to measure various aspects of integration.

TABLE V  
ANALYSIS OF VARIANCE OF POSITION SCORING ON  
CONSISTENCY MEASURE  
(SEVEN GROUPS DISTINGUISHED IN TERMS OF AGE, SEX,  
PROBLEM-NONPROBLEM)

Source of Variation	SS	df	MS	F
Between Groups	1379.098	6	229.85	.739 *
Within Groups	48793.710	157	310.79	
Total	50172.808	163		

$F_{.95} (6, 157) = 2.15$  .739

\* Nonsignificant

Nonetheless, it should be remembered that in spite of the low reliability a significant result was obtained, and had the reliability been greater, in all likelihood the results would have been even more significant.

### Treatment of Data from Diagnostic Groupings

The next formulation proposed in this research was concerned with subgrouping problem children into the three diagnostic areas of 1) aggressiveness or lack of behavioral control, 2) withdrawal or extreme shyness, 3) anxiety and/or tension, plus a fourth all-inclusive group. Significance ratios were computed for the differences between the means of the control group and each of the four problem groupings on the consistency measure, position scoring, and on the personality factors measured by the ESPQ. The results are recorded in Table VI. As was anticipated, a significant difference at the .05 level was obtained for the  $t$  ratio of total problem vs control groupings on the consistency measure.

Children with problems of shyness and withdrawal (Area 2) also produced significantly lower scores on the consistency measure than did the children designated as normal. But  $t$  ratio data failed to support the hypothesis that children with problems of aggressiveness (Area 1) and those diagnosed as anxious and/or tense (Area 3)

TABLE VI

SIGNIFICANCE RATIOS FOR DIFFERENCES BETWEEN MEANS  
FOR CONTROL AND PROBLEM GROUPS ON CONSISTENCY  
MEASURE, POSITION SCORING AND PERSONALITY FACTORS

(A minus sign indicates that the control group scores higher than the given problem group. Where the problem group is higher, no sign appears.)

	Total Problem vs Control	Area 1 vs Control	Area 2 vs Control	Area 3 vs Control
Consistency Measure	-2.454*	-1.203	-2.367*	-1.183
Position Scores	1.308	- .630	2.260*	.593
Factor A	- .789	-2.542*	1.000	.389
Factor B	- .660	.383	- .410	- .377
Factor C	-2.064*	-1.465	-1.192	-1.749
Factor D	1.469	1.182	.242	.526
Factor E	.786	1.987*	- .909	.253
Factor F	- .093	.142	- .508	.024
Factor G	-1.163	-1.515	- .606	- .526
Factor H	-1.369	- .673	- .578	- .729
Factor I	.039	- .029	1.101	.026
Factor J	1.666	1.398	1.476	.670
Factor N	2.384*	2.684**	.681	.752
Factor O	.857	.307	.314	- .144
Factor Q4	2.147*	2.079*	1.458	1.192

\* Significant at the 5 per cent level

\*\* Significant at the 1 per cent level

would have significantly lower scores than nonproblem children on the Hexad Consistency Measure.

In an attempt to glean further information about the consistency measure as well as about the children sampled, attention was focused on specific differences between the various problem areas and the nonproblem group in regard to each of the personality factors. These results are also shown in Tables II and VI. It is interesting to note that Factor C, the factor thought to be the most closely related to the concept of integration, was one of those found to significantly differentiate problem and nonproblem children at the .05 level. Other significantly differentiating factors are N and Q4. This information indicates that problem children may possess less ego strength and emotional control but are wiser than nonproblem children in the ways of adults and peers. However, they are apparently less relaxed and composed than are their well adjusted schoolmates.

Of the four measures found to be significant in the total problem vs nonproblem study (Consistency, Factors C, N, and Q4) the t ratio was highest for the consistency measure. In this comparison, therefore, the Hexad device differentiated normal children from those with problems better than the other measures employed.

In Area 1 significant results at the .05 level appeared in Factors A, E, and Q4 and at the .01 level with Factor N. The highly



significant results found with Factor N are understandable upon examination of questions presented in the N scale. A child scoring high on this factor is one with poor impulse control who obeys because he's afraid he might be punished. He has oppositional tendencies and is not particularly content with the school situation. Many children placed by teachers into the aggressive category might be expected to display a similar pattern of behavior.

As might be anticipated the aggressive child was also significantly higher on Factor E (Dominance) and lower in Factor A (responds poorly to school and teachers). He also had a high Q4 score implying feelings of tenseness. In Area 1 it is quite apparent that Factors A, E, Q4 and particularly N differentiated children with aggressive tendencies from nonproblem children better than did the Hexad Consistency Measure. No significant difference was found between Area 1 and nonproblem children in the amount of ideational consistency.

Area 2 presents a different story. Here, the only significantly differentiating t ratios were found in the Consistency Measure and Position Scoring results. One might speculate that children who are withdrawn tend to position score more than do nonproblem children because they respond more faithfully to their own inner directional forces than to stimuli presented by outer sources, in this case the examiner and the examination. Thus, it is possible, that in this

testing situation as well as with other pencil-paper objective devices, most results have been drawn from the failure of the withdrawn child to respond, to the test. It might be proposed that this fact in itself has reliably differentiated the child suffering from problems of withdrawal from his more normal peers. Perhaps there is a need for a different type of device than has been created thus far to measure children of this type. If withdrawn subjects fail to respond, it makes good sense why it has been difficult in the past to get meaningful scores from them on the ESPQ and other child measures.

And yet, in the present research, there was some indication that Area 2 children were attentive, to some extent at least, to the testing situation. Ordinarily, children who are not reflecting at all obtain significantly lower scores on Factor B (Intelligence) but this was not so in the present study. The fact remains that Consistency and Position scoring but no other factors significantly differentiated the withdrawn children from nonproblem children. Significance ratios of 2.367 for the consistency measure and 2.260 for position scoring imply that the consistency measure was the slightly more effective device.

No significant results were obtained in Area 3, leading the investigator to question the advisability of including this grouping as a separate category especially when the diagnosticians are

inexperienced. Actually, of the 26 children placed in this classification, 13 of them are also included in Areas 1 or 2. Perhaps teachers rating the children had difficulty differentiating this area from others. The non-conclusive results in Area 3 may be a reflection of this uncertainty.

#### Relationship between Consistency and ESPQ Data

Evidence concerning the relationship of the Hexad Consistency Measure and ESPQ factors was sought by running a correlational study of scores obtained by a representative group of students on these two tests. This group consisted of the 136 children tested in the Prince School's first and second grades and included those classified in both the problem and nonproblem areas. Results, recorded in Table VII, reveal that the only significant correlation found between Questionnaire factors and the Consistency measure was with Factor B. This is not surprising as it is logical to assume that an individual's ideational consistency and intellectual functioning are closely allied. The fact that consistency did not correlate significantly with any of the other personality factors measured by the ESPQ may indicate that the Hexad Consistency Test is measuring something quite different from the ESPQ. It is important to note, however, that although the correlations between the Hexad test and

TABLE VII

CORRELATIONS BETWEEN CONSISTENCY MEASURE, POSITION SCORING, PERSONALITY FACTORS, AGE AND SEX VARIABLES IN REPRESENTATIVE GROUP OF CHILDREN IN THE 6-8 YEAR OLD CLASSIFICATION

	Consis- tency	Posit. Score	Factor A	Factor B	Factor C	Factor D	Factor E	Factor F	Factor G	Factor H	Factor I	Factor J	Factor N	Factor O	Factor Q4	Age	Sex
Consistency		-.153	.144	.256**	.147	-.038	-.016	-.076	.148	.135	.048	-.047	-.159	-.166	-.097	.077	-.101
Position			-.132	-.147	-.055	.143	.054	-.038	-.154	.027	.078	.018	.092	.088	.202*	.029	-.065
Factor A				.191*	.119	-.212 *	-.478**	-.143	.320**	.099	.240**	.033	-.274**	-.192*	-.315**	.122	.095
Factor B					.115	-.029	-.008	-.129	.105	.063	-.072	.057	-.121	-.072	-.027	-.209*	.073
Factor C						-.259**	.067	.153	.069	.007	.200*	.009	-.062	-.105	-.048	-.082	-.068
Factor D							.114	-.087	-.056	-.186*	-.085	.084	.192*	.415**	.232**	-.043	.061
Factor E								.193*	-.306**	-.044	-.219*	.004	.247**	.225*	.241**	.120	.192*
Factor F									-.151	-.137	-.061	.017	.283**	.089	.173	.028	-.034
Factor G										.014	.059	-.025	-.253**	-.167	-.218*	-.114	.027
Factor H											-.136	-.038	-.193*	-.177*	-.177*	-.008	-.226
Factor I												.184*	.217*	.086	-.087	.186*	.081
Factor J													.018	.106	.076	-.039	-.037
Factor N														.343**	.283**	.076	.135
Factor O															.262**	.043	.072
Factor Q4																.272**	-.083
Age																	.132
Sex																	

\* Significant at the 5 per cent level  
\*\* Significant at the 1 per cent level

individual personality factors are not significant, nonetheless they are in the expected direction. By and large, consistency correlates positively with factors expected to reflect emotional control (A, B, C, G, H, I) and negatively with those areas indicating disturbance (D, E, F, J, N, O, Q4).

The next bit of information pursued was the relationship between consistency scores and secondary factor groupings proposed by Cattell (1957) as a means of differentiating individuals into different diagnostic categories. The second order factor of anxiety was the one thought to be most closely allied with the Consistency measure. Cattell's studies indicate that persons diagnosed as anxious generally have high scores on Factors O and Q4 but low scores on Factors F and C. In the present study, high consistency scores are negatively correlated with high O and Q4 and low C scores (Table VII) indicating that children who scored high on the Consistency test were also high in confidence, composure and ego strength. Only on Factor F do scores run counter to expectation. But, in general, the above evidence lends support to the supposition that low ideational consistency and the second order factor of anxiety go hand in hand and that individuals with high consistency scores lack signs of anxiety.

Positive correlations between consistency and Factors A and H, though not significant, may nonetheless indicate that children who

are more consistent also tend to be warmer, more sociable, less apt to withdraw and better able to withstand strain and stress. In children high E scores are thought to go along with conduct disorders but the slightly negative correlation of .016 between high consistency scores and Factor E offers little indication that these two elements measure similar personality facets.

The investigator thought it might be interesting to examine other second order scales to note any similarities between these and consistency data. The second order factor of Extroversion, for example, is indicated by high scores on Factors A, H, E, and F. Consistency data correlates positively with Factors A and H but negatively with E and F, and thus no evidence of a connection between consistency and extroversion is apparent.

The second order factor of Sensitivity is denoted by high I and O scores and low H. High consistency scores are positively correlated with low O, H, and I. This provides some rather inconclusive evidence of a tendency for a potential relationship between consistent children and those thought to be more thick skinned, less sensitive to emotional buffs.

As for psychopathic tendencies as outlined by Cattell, with high scores in E, H, and Q4 and low on G, correlations with consistency ran in almost the opposite direction and thus indicate little connection between psychopathic personalities and those scoring high

on the Consistency test. Likewise, consistency data and the outline for the second order factor of neurosis presented no consistent correlational trends.

Though not directly connected with formulations proposed in this study, other correlations recorded in Table VII are interesting to observe. For instance, once again there seems to be no significant connection between the age and sex variables and scores on the Hexad Consistency Measure. Nor is there a significant relationship between position scoring and consistency rating. This is interesting in the light of information gleaned in Area 2 where Consistency and Position presented the only significant results.

## VI. DISCUSSION OF RESULTS

The significant difference found between total-problem and non-problem children on the consistency measure lends support to the formulation that children without behavioral problems are more consistent in their ideas and attitudes and thus in possession of a better integrated personality than are children with behavior problems. But the significance level was .05 and thus not as conclusive as was anticipated. Moreover, in the breakdown of the total problem group into diagnostic areas of aggressiveness, withdrawal and anxiety/tension, only the withdrawn children scored notably lower on the consistency measure than did their nonproblem peers. Many possible explanations for this come to mind. Errors in the experimental procedures, particularly in the method used to place children into diagnostic groups, could well have been the principal cause for some of the insignificant results obtained. As will be remembered, principals and teachers were asked to pick out children in first and second grade classes who fell into one or more of three categories. Elementary school personnel in most instances are not trained in the art of personality diagnosis. Likewise, in this experiment the investigator failed to give the teachers and principals specific



information concerning the intensity of symptomatology required for placement of children in the diagnostic categories. Thus Area 1 may well contain some children with severe problems of aggression, children who are unable to regulate emotional outbursts and have few or no behavioral controls. On the other hand, it is more than likely that lively, individualistic, bright children who are nonconformists are also included. The child whose outlook is highly extratensive though not necessarily pathological could also have been numbered among those classified as aggressive. There is, therefore, a strong possibility that Area 1 contains both healthy and unhealthy children.

In Area 2, on the other hand, the possibilities differ. Generally recognized is the fact that the quiet conforming child often is not thought to have emotional problems until his condition is sufficiently extreme to interfere seriously with his performance. It is possible, therefore, that children diagnosed as withdrawn or shy in this study were on the whole more severely disturbed than were the children diagnosed aggressive. In addition, the category itself, as presented to the raters, was more restricted and included a narrower range of symptoms than did Areas 1 and 3.

The third area apparently gave the teachers and principals the greatest rating difficulties. No information was presented to the raters concerning the clinical meaning of the term anxiety and this

might partially account for the confusion which resulted, as well as for the negative results.

Other factors might also account for the differences found in ideational consistency between children placed in different diagnostic groupings. It may be that withdrawn children, generally speaking, are more disturbed than are either aggressive or tense youngsters. Jessie M. Williams (1961), for example, in her study of children in foster homes has concluded that problem children show a trend from impulsivity and spontaneity toward a constriction of personality as they construct stronger defenses against the stresses and hurts confronting them. This conclusion supports the above speculation that the withdrawn child is in poorer mental health than is his impulsive brother and therefore in possession of less personality integration.

Helen Frazee's study (1953) of children who later became schizophrenic reveals that the symptom of anxiety is more apt to occur at the neurotic level of adjustment but that withdrawal into fantasy signifies a more severe and possibly psychotic condition. Likewise, Frazee found that indifference and lack of consistency characterize the mothers of schizophrenic children. It is interesting to note that similar inconsistency in ideas and attitudes also typifies the thinking process of their withdrawn children.

Results obtained from the administration of the Hexad Consistency Measure would seem to substantiate the aforementioned proposals made by Williams and Fracee and it is possible to speculate that the more severely disturbed withdrawn children are apt to be less consistent than are mildly disturbed and nonproblem children. Furthermore, the experimental findings do reveal the potentiality of a measure of ideational consistency as a means of determining the presence of personality integration in children, although at this time the Hexad instrument is not sufficiently refined to use as an objective testing device for accurately measuring consistency in each individual child. For such a purpose a much more reliable instrument would be needed.

Unfortunately, the outcome of this research is not as conclusive as had been hoped. Perhaps more highly significant results would have been obtained had the test been presented to children professionally diagnosed as problem or normal. Were the study to be repeated it would be important not only to design a more reliable instrument but also to greatly improve the sampling techniques. As of now, however, the Hexad Consistency Measure has provided the information initially sought in this research by verifying the primary hypothesis that children with behavior problems are less consistent in their

attitudes and ideas than are those classified as normal. Moreover, the Hexad instrument differentiated problem children from non-problem more significantly than did the other measures employed in this study.

## VII. SUMMARY

A twenty item Hexad Consistency Test was devised and presented to two groups of first and second graders as a possible means of determining personality integration in 6-8 1/2 year olds. One group was made up of 97 nonproblem children. A second group consisted of 67 children classified by their teachers as having problems of aggression, withdrawal and anxiety, either separately or in combination.

In general, results indicated that consistency does reflect personality integration in children. Significantly higher scores (.05 level) were obtained by nonproblem children on the Consistency measure. Likewise, a sub-grouping of children classified as having problems of withdrawal had significantly lower Consistency scores (.05 level) than did nonproblem children.

The Early School Personality Questionnaire was also administered to both groups. It was found that the consistency measure differentiated normal from problem children better than any of the personality factors on the ESPQ. Comparison of Consistency and ESPQ scores for a representative group of 136 children revealed

that by and large the tests tap different personality elements. Factor B (Intelligence) was the only factor to correlate significantly with Consistency scores. In general, however, Consistency correlated positively with factors expected to measure emotional control and negatively with areas indicating disturbance.

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