6-1-1967

Using Eriksonian concepts in observing developmental levels in two groups of preschool children

Roland J. Lindstrom
Portland State University

Ross A. Lurgio

Joyce H. MacFarlane

Leonard H. Seyfarth

Kay J. Stenberg

See next page for additional authors

Follow this and additional works at: https://pdxscholar.library.pdx.edu/open_access_etds

Let us know how access to this document benefits you.

Recommended Citation

Lindstrom, Roland J.; Lurgio, Ross A.; MacFarlane, Joyce H.; Seyfarth, Leonard H.; Stenberg, Kay J.; and Wadsworth, H. G., "Using Eriksonian concepts in observing developmental levels in two groups of preschool children" (1967). *Dissertations and Theses*. Paper 323.
<https://doi.org/10.15760/etd.323>

This Thesis is brought to you for free and open access. It has been accepted for inclusion in Dissertations and Theses by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: pdxscholar@pdx.edu.

Author

Roland J. Lindstrom, Ross A. Lurgio, Joyce H. MacFarlane, Leonard H. Seyfarth, Kay J. Stenberg, and H. G. Wadsworth

AN ABSTRACT OF THE THESIS OF

ROLAND J. LINDSTROM, et al. for the MASTER'S DEGREE

in SOCIAL WORK presented on April 20, 1967

Title: USING ERIKSONIAN CONCEPTS IN OBSERVING DEVELOPMENTAL LEVELS IN TWO GROUPS OF PRE-SCHOOL CHILDREN

Abstract approved:

Frank F. Miles

In this study concepts from Erikson's widely cited theory of child development were operationally defined and empirically tested.

The purposes of the study were: (1) to ascertain whether a set of social workers with an understanding of Eriksonian theory could use it in a meaningful way to observe pre-school children; (2) to ascertain whether the theory could be used to differentiate between culturally advantaged, culturally deprived, and, as emerged in the analysis, handicapped children; (3) to ascertain whether the theory could be used diagnostically to obtain information about a child's developmental level or problem area.

In the fall of 1966 six paired observers using a schedule of traits relating to Eriksonian concepts of developmental stages studied a class of 21 pre-school children enrolled in an enrichment

program. The children were observed in their activities, data compared with that from case records and from parent interviews and analyzed on the basis of three categories of children--culturally deprived, culturally advantaged, or handicapped--seven children in each.

Pre-tests led to a 37 item schedule, each item scored on a 100-point scale. Items consisted both of specific behavioral questions and of global questions calling for clinical judgment. Tests were based on the means of paired observations.

Based on statistical inference the following findings were accepted:

(1) Positive global items were inversely related to negative global items for stages children had passed through. Only positive global items were used for statistical purposes.

(2) For the global items, a significant relationship emerged between direct observations and case records, but not between observations and parent interviews, nor between case records and parent interviews.

(3) Although records correlated with observations, records were too incomplete to be useful for study purposes.

(4) Intra-pair reliability of observers only approached significance.

(5) Inter-pair reliability of observers was significant.

(6) A significant relationship was found between observers' global items and observers' selected items, but not between observers' global items and parents' global items.

(7) Observers' global items tended to support the proposition that a child must resolve the earlier stages before subsequent stages can be resolved, but observers' selected items and parents' global items did not.

(8) Age and developmental level were related for both deprived and handicapped children, but not for advantaged children.

(9) Deprived and advantaged children were significantly differentiated from the handicapped children, but not from each other.

(10) Diagnostic distinctions between individual children appeared which were related to children's developmental levels and/or problem areas, but not in a clear and systematic way.

Findings tended to support Eriksonian theory, but further refinements and related research are indicated.

APPROVED:

Associate Professor of Social Work

Dean, School of Social Work

Dean of Graduate Studies

Date thesis is presented April 20, 1967

Typed by Illa W. Atwood for Roland J. Lindstrom, et al.

USING ERIKSONIAN CONCEPTS IN OBSERVING
DEVELOPMENTAL LEVELS IN TWO GROUPS
OF PRE-SCHOOL CHILDREN

by

ROLAND J. LINDSTROM
ROSS A. LURGIO
JOYCE H. MAC FARLANE
LEONARD H. SEYFARTH
KAY J. STENBERG
H. G. WADSWORTH, JR.

A GROUP RESEARCH PROJECT

submitted to

Portland State College

in partial fulfillment of
the requirements for the
degree of

Master of Social Work

June 1967

PORTLAND STATE COLLEGE
LIBRARY

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
Nature of the Study	1
Hypotheses	2
Type of Study	2
Population	3
Setting	4
Relationship to the Field	6
Secondary Aims	6
Limitations	7
General Approach	8
Rationale	8
Definitions	10
Examples of Definitions	11
Conclusion	13
II. A REVIEW OF THE LITERATURE	15
Search of the Literature	15
Erikson's Psychoanalytic Base	16
The Concept of the Ego as Freud Left It	16
Hartmann's Theory of Adaptation	17
Erikson's Expansion of the Theory of Adaptation	18
The Charge Against Psychoanalysis	19
Some General Comments on Erikson's Eight Stages	21
Erikson's Eight Stages of Man	23
I. Psychosocial Crisis: Basic Trust Versus Basic Mistrust	23
II. Psychosocial Crisis: Autonomy Versus Shame and Doubt	24
III. Psychosocial Crisis: Initiative Versus Guilt	26
IV. Psychosocial Crisis: Industry Versus Inferiority	28
V. Psychosocial Crisis: Identity Versus Identity Difusion	29
VI. Psychosocial Crisis: Intimacy Versus Isolation	31

TABLE OF CONTENTS (Continued)

	<u>Page</u>
VII. Psychosocial Crisis: Generativity Versus Stagnation	32
VIII. Psychosocial Crisis: Ego Integrity Versus Despair	32
Erikson Reviewed	33
Favorable Reviews	33
Somewhat Less Favorable Reviews	35
The Field of Child Development in Relationship to this Study	36
Conclusion	37
III. GENERAL METHODOLOGY	39
The Problem	39
General Hypothesis	39
Terms of the General Hypothesis	41
Design and Execution of the Pre-test	42
Results of Pre-test	43
Operational Definitions	45
Development of the Questionnaire and Scale	47
Generating Operational Definition	50
The Scale	51
Population	51
Situation and Time	52
Records	53
Interviews	54
Statement of Hypotheses	55
Tabulation and Statistics	56
IV. FINDINGS	58
Description of the Children	58
Hypotheses	59
Hypothesis #1	59
Intra-Pair Reliability	64
Inter-Pair Reliability	68

TABLE OF CONTENTS (Continued)

	<u>Page</u>
Hypothesis #2	75
Hypothesis #3	81
Summary	87
V. CRITIQUE	89
Summary	89
Resumé of the Findings	90
Limitations of the Study	92
Proposals for Future Research	94
Value of this Study to the Field of Social Work	97
BIBLIOGRAPHY	99
APPENDIX I	104

LIST OF TABLES AND FIGURES

<u>Table</u>	<u>Page</u>
I Relationship between Positive and Negative Global Questions based on Social Worker Observa- tional Means	60
II Relationship between Data Sources	62
III Intra-Pair Reliability	65
IV Relationship between Global and Selected Questions and between Global and Parent Questions	70
V Relationship between Stages I, II, III and IV	72
VI Association between Age and Raw Score	73
VII Means of Corrected Scores	76
VIII Relationship between the Three Groups in Respect to Global, Selected, and Parent Perceptions	77
IX Developmental Global Raw Scores for Selected Children	83
 <u>Figure</u>	
1 Global Perceptions for the Advantaged, Handicapped and Deprived	78
2 Parents' Perceptions for Advantaged, Handicapped and Deprived	79
3 Means of Global, Selected, and Parents	80

USING ERIKSONIAN CONCEPTS IN OBSERVING DEVELOPMENTAL LEVELS IN TWO GROUPS OF PRE-SCHOOL CHILDREN

CHAPTER I

INTRODUCTION

In this chapter an overview of the study, particularly the nature of the study in general, its relationship to the field of social work, the rationale, and the general approach are the central concerns. Subsequent chapters deal with theoretical background, methodology, findings, and evaluation of the findings.

Nature of the Study

In the fall of 1966 six paired observers using a schedule of traits relating to Eriksonian concepts of developmental stages studied a class of pre-school children enrolled in an enrichment program. The children were observed in their activities, data compared with the case records and with parents' interviews and analyzed on the basis of three categories of children--culturally deprived, culturally advantaged or handicapped.

The general aim was to determine whether a group of social workers with an understanding of Erik H. Erikson's (1963a, p. 273) theory of developmental stages could use the theory with reliability and validity to observe pre-school children.

Could the theory be used to differentiate diagnostically among individual children, or among groups of children? If so, Eriksonian theory and related practice were to be supported. If not, theory and research methods were to be questioned.

Hypotheses

The researchers utilized some of the child developmental concepts of Erikson. From this source a series of testable statements was developed regarding the developmental levels of pre-school children. The general hypotheses were that: (1) a set of social workers with an understanding of Erikson's theory of developmental stages could use the theory with reliability and validity to observe pre-school children; (2) the theory could be used to differentiate between culturally advantaged, and culturally deprived children; and (3) the theory could be used diagnostically to obtain information about a child's developmental level or problem area.

Type of Study

The study approached basic research. It was a theoretically derived, empirical, field-observational study. Erikson's theory is based on his research as anthropologist, child analyst, and training analyst. The study represented an attempt to dip down again into direct observation in such a way as to test out the

concepts.

The researchers were six social work graduate students who had taken a year's course largely devoted to Eriksonian theory. They developed the operational definitions and reached agreement regarding use of the questionnaire in direct observation.

Population

The twenty-one children observed were enrolled in a cultural enrichment type of pre-school program of approximately 100 in the Jewish Community Center, Portland, Oregon, in the fall, 1966. Researchers had no prior knowledge of individual subjects or of their relevant characteristics, other than the fact that the study group included children culturally deprived, culturally advantaged, and physically and mentally handicapped.

Criteria for the selection of the culturally deprived children for the purposes of the study were those utilized by Gordon, et al. (1966). These children were from families with "income level of \$3,000 or less, speech deficiencies, little interaction with others, functional illiteracy of family, emotional problems of family, consistent school problems of older children, sub-standard family life, poor nutrition, and drab family life (Gordon, et al., 1966, p. 1-2). "

The culturally advantaged children came from homes in

which the parents worked with the children to improve them through books, supplies, experience, valued the attaining of superior levels, and, except for one child, were above average occupationally or economically.

The handicapped children who emerged as a group were those whose records included a medical diagnosis of physical or mental handicap.

Setting

The pre-school program was part of an effort to reach out to children of culturally deprived families. It had been added to the well-established pre-school program. It included, in addition to the pre-school classes, casework and special education contacts in the homes, trips, classes for parents in such areas as personal grooming and housekeeping, health services and referrals, and volunteer activities for parents.

The pre-school program for all the children included a highly personalized approach to each child by the teachers, provision of many materials, and an attempt to provide for the development of trust in consistent relationships with teachers. Opportunities and equipment for vigorous play were provided, as well as a diverse program of more quiet activities. Included were simple arts and crafts, singing, simple cooking, and

individual and group games.

A previous study by Gordon, et al., (1966, p. II-6) had studied the culturally deprived children. It sought to evaluate the effects of the pre-school experience on disadvantaged children, and compared two matched groups of deprived children, one which had received pre-school experience and one which had not. They found that the average improvement in IQ scores of the pre-school group was no greater than that of the non-pre-school group. However, they found that the number of pre-schoolers showing improvement in IQ scores was greater than the number of non-pre-schoolers showing improvement in IQ scores.

Our study sought to utilize a different approach from that of Gordon, et al. Whereas they compared two groups of deprived children to determine the effects of pre-school, our study examined one pre-school class of children to determine whether children could be divided into two groups, the culturally advantaged and the culturally deprived. Whereas they utilized well-known instruments, we developed our own instrument and methods. Different traits were measured. Whereas they utilized both pre- and post- measures to measure change over time, we made measurements during one period of time.

Relationship to the Field

The cultural enrichment program in which the pre-school children enrolled had been funded in part through the Office of Economic Opportunity. The findings might be of use to other projects connected with that office. The expanding pre-school, day care, and Headstart movements might benefit from the findings.

The growing general concern with the area of the handicapped child was evidenced in the study. Indeed, the particular pre-school program for the handicapped antedated the recent expansion of federal programs for the mentally retarded.

Secondary Aims

Erikson's theory of developmental stages had been a widely taught and utilized one in the field of social work. It formed, for example, the major theoretical underpinning for the 1950 White House Conference on Children and Youth. A popular psychoanalytic theory, its currency extended through social work, psychiatry, education, clinical psychology, child care, nursing, and beyond. The project was undertaken with the intent of adding to the body of knowledge available to those in the helping professions.

It was expected that observational and study methods would be developed that might serve as fruitful tools and productive

techniques for future research.

It was hoped that the conclusions would stimulate greater professional and public interest in the child developmental processes.

Additionally, it was hoped that the study might be of value to the host agency in its future program planning and development.

Limitations

The small size of the sample of children makes it difficult to generalize to the population or to the community at large, although the findings may be considered as suggestive.

An attempt was made to get at the central points of theory. Related questions arose. Could any child advance in later stages without having made a favorable resolution in an earlier stage? To what extent were children working on two crises simultaneously due to cultural expectations or other factors? How differently did children resolve developmental crises due to cultural expectation, family and peer interactions? How did advantaged children respond to the cultural enrichment program and to the deprived children? Although there were some suggestive findings, such issues as these were not dealt with definitively, due to the limitations of the study.

General Approach

The research group utilized some of the child developmental concepts of Erikson. From this source we formulated lists of testable statements regarding developmental levels of pre-school children. We developed a series of instruments, arriving at a questionnaire to explore the developmental levels of children. Pairs of researchers applied the questionnaire technique to the children in direct observation, to case records, and to parent interviews about the children. The children were 21 pre-school children enrolled in one of the pre-school classes at the Jewish Community Center, Portland, Oregon, in the fall of 1966. Children included the culturally deprived, the culturally advantaged, and, as became apparent, the physically and mentally handicapped. Researchers' intents were to explore some of the developmental concepts of the widely-held theory, and to generate a related instrument that would be useful in the study of child development and in the practice of the helping professions.

Rationale

Erikson's theory seeks to integrate biological, psychological, and social aspects of the individual within stages of development. Each stage is conceived of as having its characteristic crisis and

resolution.

The theory itself is dealt with more thoroughly in Chapter Two. At this point we simply note how it was used.

There are numerous theories of child development, and an extensive literature on human growth and development. However, there is little known relationship between the more scientific and the more psychoanalytic theories.

Erikson's theory might be clarified, modified or enriched in such a way that it could be expressed in terms of scientific findings. Or Eriksonian concepts might be used to contribute to general theory around which scientific theory could be ordered. As a first step Eriksonian theory would have to be shown to be internally consistent and consistent with independently derived observations.

This study was involved at the point of testing, in a small way, whether Erikson's theory is subject to tests of internal consistency, and reliability in application.

Erikson has indicated that he does not believe that his concepts are particularly amenable to empirical test (1965 a, footnote No. 16). Our study attempted to determine to what extent his opinion might be justified.

As an initial attempt, this study was not a complete test of the theory. Rather, certain assumptions or hypotheses were made, based on theory. Other assumptions led to the development of the questionnaire. It was to be shown that a logical relationship obtained among theory, hypotheses, questionnaire, and analysis. In effect, it was the logical relationship which was undergoing test. While positive findings were to add to general knowledge and were to tend to support the theory, they could neither prove nor disprove Eriksonian theory.

Definitions

Operational definitions were developed in an attempt to provide as objective an account of the observational process as possible. Extended operational definitions included all steps in conduct of the study, the researchers' scoring, the use of the questionnaire and statistically derived inferences.

In arriving at operational definitions, the researchers went through a process of initial exploration of the theory. Behavioral items, illustrative of Erikson's concepts, were culled from the literature and included in a first schedule. Pretesting and further exploration of the definitions of the concepts led to a second observational schedule, a trait schedule. Subsequent pre-testing and reformulations led to a final questionnaire which was derived

from the first two schedules. It consisted of some 37 questions listed in the appendix regarding behavior of the child, guiding the observer's inferences about the developmental levels of the child. The final questionnaire was judged by the researchers to reflect the theory, the children, and the demands of the observational task.

Independent observations were made by pairs of observers. The questionnaire consisted of the 37 questions which the observer asked himself about the child and his behavior. Each question was answered in terms of a 100 point scale of extensity, pertensity or intensity.

For example, basic trust was operationally defined as follows: when the observers saw one of a variety of behaviors of the child related to the nine questions about trust, such as, "How sure of himself is he?", or "How trusting [in the Eriksonian sense] is he?"; if the observer observed it, made inferences about it, and marked his scoring sheet accordingly, the score was the index of the amount of basic trust.

Examples of Definitions

A child shows basic trust when he responds to normal stimuli without undue anxiety. Observed or expected behaviors that were called trust included the child's appearing to (1) be sure of himself, (2) be comfortable with new people or situations, (3) enjoy looking

at things and hearing sounds, and (4) be trusting.

A child shows basic mistrust when he responds to normal stimuli with anxiety, regression, and withdrawal. Behaviors that were called mistrust included the child's appearing to (1) get upset when mother leaves him, (2) spit up saliva or food often, (3) over-eat much or often, (4) put things into his mouth often, (5) cry, pout, whine, or whimper.

Behaviors that were taken as generally indicative of the first stage, basic trust versus basic mistrust, included: (1) Receiving and accepting what is given, e. g. , taking in with mouth by sucking, swallowing; taking in with eyes, with ears, with tactual senses; spitting up and out; and (2) Actively incorporating, e. g. , taking in with mouth by biting, biting off, biting on through, chewing, oral testing; taking or holding with eyes, with ears; taking with arms, gripping, grasping, holding; taking with interpersonal patterns; letting mother out of sight without undue rage or anxiety, etc.

Each of the following concepts entailed similar lists of behaviors.

A child shows autonomy when he carries out activities with a large degree of self-control and independence. He shows shame when he is overwhelmed by the self-conscious awareness that he is witnessed too soon. In such a case he shows defiant insensibility

to himself and others, or refuses to risk direct encounter. He shows doubt when his confidence is shaken in mutual regulation between himself and his world. In such a case he pretends self-control he does not have or returns to an earlier oral control.

A child shows initiative when he enters freely into new undertakings and is moderately aggressive with language, play and physical attack. He shows initiative by independent action, imaginative and imitative play and curiosity in sexuality, people, and things. A child shows guilt when he cannot enter freely into undertakings and cannot display aggression in play and language. A child may show self-righteousness, tireless initiative, self-punishment, and resignation in guilt behavior.

A child shows industry when he applies himself to given skills and tasks, alone and with others, and takes pleasure in work productiveness. A child shows inferiority when he does not apply himself to given skills and tasks and he displays feelings of inadequacy in work situations.

The reliability and consistency of such observation-based inferences or judgments were testable and laid the basis for the central statistical inferences of the study.

Conclusion

Thus, the purposes of the study were to explore and opera-

tionalize concepts from Erikson's theory, to develop an observational instrument, and to put that instrument to some theoretical, observational, and diagnostic use.

Before dipping into the development of observational techniques it is necessary to examine the theoretical superstructure.

CHAPTER II

A REVIEW OF THE LITERATURE

In this chapter, the eight stages of man's psychosocial development as delineated and advanced by Erik H. Erikson, will be the central theme. The first four stages will be given particular attention. This is not because they are seen as having more importance than any other stage or grouping of stages (Erikson, 1960), but because they are the special interest of this study. Since the relationship of Erikson's conceptions to the purposes of this study has as much to do with their origins in psychoanalytic theory as it does with their application in the field of child development, both aspects will be considered here.

Search of the Literature

In reviewing the literature, the thesis group searched the following sources:

- Books by or about Erikson
- Psychoanalytic Journals
- Psychiatric Journals
- Social Work Journals
- Psychological Abstracts
- Educational Index
- General Periodic Literature Index
- Abstracts of Educational Theses
- Social Work Theses

Except for Erikson's work and selected classic contributions to psychoanalytic literature, the search was limited to the period from 1960 to 1966. Other than that mentioned in Chapter I, literature on disadvantaged children was not reviewed. The criteria laid down by the Jewish Community Center were accepted for the purposes of this study, principally because the focus had to be on a thorough and intensive study of the writings of Erikson.

Erikson's Psychoanalytic Base

Erikson (1964 b) calls himself a Freudian and states, "Sigmund Freud's monumental work is the rock upon which exploration and advancement must be based (1962 b, p. 8)." Maier and others believe, however, that "Erikson's thinking presents a decisive departure from, and an advance beyond, Freudian psychology (1965, p. 16)." In order to broaden understanding of his eight stages, one of Erikson's major divergences will be considered here, namely, the completion of the shift, begun by Freud, from emphasis on the id to emphasis on the ego.

The Concept of the Ego as Freud Left It

In the review of the history of psychoanalytic ego psychology with which David Rapaport introduces Erikson's Identity and the Life Cycle, the development of ego psychology is divided into four

stages (1959). The first three are contributions of Freud. His concept of the ego varied considerably over the years and culminated in the publication of The Ego and the Id, in 1923 (Erikson, 1959). Freud's final view, often compared to Walter Cannon's biological homeostasis concept, was that "the ego's integrative functions included not only making compromises between opposing forces but also establishing harmony between them (Lifshutz, 1964, p. 4)."

Hartmann's Theory of Adaptation

Heinz Hartmann (1964) gave to psychoanalysis the first coordinated theory of the relation of man to his environment, in 1937. Essentially he propounded that people are born with "an undifferentiated id-ego matrix, and "some primarily autonomous potentials that have an inherent maturational timetable (Lifschutz, 1964, p. 5). " These potentials assure "a stage of adaptedness to the average expectable environment, " and through the adaptation process, the ego produces "secondarily autonomous functions, " separating them from their original "involvement with the direct instinctual gratifications (Lifschutz, 1964, p. 5). " Although the ego is essentially autonomous, then, regression, allowing "the use of the primitive and archaic mechanisms" of both, sometimes serves the process of adaptation (Lifschutz, 1964, p. 5).

Erikson's Expansion of the Theory of Adaptation

Rapaport says that Erikson set the stage for the study of ego epigenesis when he tied together the phases of psychosexual epigenesis and "the sequence of phases of psychosocial development (Erikson, 1959, p. 14). " Erikson stresses the coordination between the developing human being and his social environment. This is similar to Hartmann's reference to the developmental process which is "coordinated to typical experiences" or that is to say, "triggered by average expectable environmental situations (Hartmann, 1964, p. 104). " Erikson carries it somewhat further, postulating a cogwheeling of the life cycles. He says, ". . . it means that the individual's life-stages are 'interliving,' cogwheeling with the stages of others which move him along as he moves them (Erikson, 1961, p. 151). "

Lynd (1961) points out that Adler, Horney, Fromm and Erikson have all spoken of the need to know the particular social milieu in which an individual personality was formed before an attempt can be made to understand its behavior. Erikson says that cultural considerations are much more basic than the common-sense acceptance Hartmann, Kris, and Loewenstein "find sufficient (1959, p. 152). "

Rapaport states, however, that Erikson and Hartmann do not

essentially disagree. He says,

The crucial characteristic of this psychosocial theory of ego development, and of Hartmann's adaptation theory (in contrast to the "culturalist" theories) is that they offer a conceptual explanation of the individual's social development by tracing the unfolding of the genetically social character of the human individual in the course of his encounters with the social environment at each phase of his epigenesis. Thus it is not assumed that societal norms are grafted upon the genetically asocial individual by "disciplines" and "socialization," but that the society into which the individual is born makes him its member by influencing the manner in which he solves the tasks posed by each phase of his epigenetic development (Erikson, 1959, p. 15).

Lifschutes says,

Erikson carefully correlates the social, or psychosocial crises of various ages and life periods with the particular psychosexual problems of the stages of instinctual development. . . For example. . . the issue of trust versus mistrust, in Erikson's view, represents a psychosocial, adaptive crisis. He notes that this dialectic problem in one form or another, is universal and that every human ego contains within it some sort of resolution of the dilemma. The idea that these crises occur universally obviously makes this a particularly challenging theory (1964, p. 7).

The Charge Against Psychoanalysis

Eysenck is perhaps the most vocal critic of the psychoanalytic approach. In the following two quotes, he says that psycho-

analysis does not have claim to the field of science and that it verifies its theory by pointing to its theory for proof.

. . . quite briefly and dogmatically. . . psychoanalysis in my view is trying to understand, rather than explain; . . . consequently it is essentially non-scientific and to be judged in terms of belief and faith, rather than in terms of proof and verification; and that lastly its great popularity among non-scientists derives precisely from its non-scientific nature, which makes it intelligible and immediately applicable to problems of "understanding" other people. This judgment I believe to be a statement of fact, rather than a value judgment. Religion and art are two other non-scientific disciplines which in spite of their lack of concern with scientific truth have contributed greatly to human happiness; to say that they are less valuable than science implies a scale of standards and values which itself is subjective and non-scientific (Eysenck, 1959, p. 226).

What type of evidence other than the clinical do Freud and his followers adduce in support to their claims? There are two main varieties. The first related to the integrated nature of the whole body of hypotheses, theories, practices, and treatments which makes up modern psychoanalysis. An integrated system of constructs in science has unique advantages; it also has considerable dangers inherent in it. The advantages lie in the mutual support which the various parts of the system give to each other; the dangers lie in the tendency for interpretations to be biassed in terms of the analyst's preconceived notions. This danger is particularly marked in psychoanalysis because interpretation of observations forms such a large portion of the whole structure (Eysenck, 1959, p. 229).

Some General Comments on Erikson's Eight Stages

Of his conceptions, Erikson says each developmental component, is "systematically related to all others" and . . . they all depend on the proper development in the proper sequence (1959, p. 53). . . " He goes on to say that each "virtue" exists in an individual from the beginning of his life, but that each has its "stage of ascendancy". . . when its rudiments must develop from the inter-play of the advancing lifestages. . . with an expanding social interaction. . . or remain retarded and stunted. " So it is that the virtues "become the inner strength of the human life-cycle which has evolved as a safeguard of the continuity of psychosocial evolution (1961, p. 153). "

Friedenberg is not comforted by this view, commenting, "since we are all maimed and twisted, and none of us is fully confirmed in his potential. . . our life situation is always desperate but never serious (1965, p. 3). "

Maier (1965, p. 17), on the other hand, sees Erikson's views as so optimistic that they represent one of his major divergences from Freud, in that he stresses the "developmental opportunities in the individual to triumph over the psychological hazards of living" through resolution of the crises.

Maier (1965), also sees Erikson moving away from Freud

when he points to the total social complex as being as influential to the individual, finally, as the mother-father-child triad. Lynd agrees that Erikson goes beyond Freud to "explicit recognition of the importance of shifting social relations, and also of greater surplus energy in each stage (1961, p. 205)."

Elizabeth Meier (1964) and others point to Erikson's recognition of the psychosocial moratorium required for strengthening of identity as one of his important contributions. Erikson says,

Social institutions support the strength and the distinctiveness of work identity by offering those who are still learning and experimenting a certain status-of-the-moratorium, an apprenticeship or discipleship characterized by defined duties, sanctioned competitions, and special freedoms, and yet potentially integrated with the hierarchies of expectable jobs and careers, castes and classes, guilds and unions (1959, p. 145).

Erikson stresses the polarity of the human experience, noting, "Only in the light of man's inner division and social antagonism is a belief in his essential resourcefulness and creativity justifiable and productive (1959, p. 61, footnote No. 4)."

Although Erikson says "intuition and objective data, conceptual framework and experience are acceptable as the corners of the area to be staked out" by a clinician (1964 b, pp. 49-50), he says also that "attempts at transverting clinical concepts into quantifiable items subject to experimental verification are always undertaken at the risk of the experimenter (1965 a, footnote No. 16)."

Erikson's Eight Stages of Man

A summary of the eight psychosocial stages of man as seen by Erikson follows:

I. Psychosocial Crisis: Basic Trust Versus Basic Mistrust

In this, the first stage of life, covering roughly the first year, it is as if the child says, "I am what I am given" (Erikson, 1959, p. 82). "Freud refers to this as the "oral" stage. Erikson says,

As the newborn infant is separated from his symbiosis with the mother's body, his inborn and more or less coordinated ability to take in by mouth meets the mother's more or less coordinated ability and intention to feed him and to welcome him (1959, p. 56).

The newborn approaches life, then, in an "incorporative" way, and establishes with his mother a sense of mutual regulation. Erikson says, ". . . that in thus getting what is given, and in learning to get somebody to do for him what he wishes to have done, the baby also develops the necessary groundwork to get to be the giver (1963 a, p. 6). . . "

During the latter part of the first stage the baby becomes more actively involved in getting, and Erikson calls this the "active incorporative mode (1959, p. 59). "Not only does he find pleasure in biting, but he learns to "grasp" objects with his hands, his eyes,

and his ears. The successful resolution of this crisis, through the mother's firm trustworthiness, provides a "consistency, continuity, and sameness of experience (Erikson, 1963 a, p. 247)..." It forms for the child the basis of a "sense of identity which will later combine a sense of being 'all right' - of being oneself, and of becoming what other people trust one will become (Erikson, 1963 a, p. 249). "

Finally, Erikson contends that it is not from frustration of parental handling that children become neurotic, but from "lack or loss of societal meaning (1963 a, pp. 249-50). " However,

. . . even under the most favorable circumstances, this stage seems to introduce into psychic life (and become prototypical for) a sense of inner division and universal nostalgia for a paradise forfeited. It is against this powerful combination of a sense of having been deprived, of having been divided, and of having been abandoned - that basic trust must maintain itself throughout life (Erikson, 1963 a, p. 250).

II. Psychosocial Crisis: Autonomy Versus Shame and Doubt

In the second stage it is as if the child says, "I am what I will (Erikson, 1959, p. 82). " This is the period of early childhood, spanning from approximately age one year through age three years. This stage corresponds roughly to the anal period as described by Freud. Erikson says,

The anal zone lends itself more than any other to the display of stubborn adherence to contradictory impulses because. . . it is the modal zone for two conflicting modes of approach, which must become alternating, namely retention and elimination. Furthermore, the sphincters are only part of the muscle system with its general duality (1963 a, pp. 81-2). . .

The muscle system of the child begins to mature and the complex task of coordination extends itself into the all important social modalities of holding on and letting go. Each of these modalities contains positive and negative forces. To hold on can mean to protect, to love or it can mean to confine, to hoard. To let go can mean to release, to let alone, or it can mean to discharge, as ammunition. The learning of language at this time is especially meaningful to the stage.

The crisis, then, becomes one of autonomy (self-control, will) versus shame and doubt (a sense of premature exposure, or not being ready to control, and "secondary mistrust") (Erikson, 1959, p. 68). As in every stage, the social context in which the child finds himself has much to do with successful solution to the crisis. Erikson points out that much of our Western civilization takes toilet training of the young quite seriously and as a result, the crisis is often acute. If the parenting persons are too severe in the "outer control" of the child at this time, they rob him "of his attempt gradually to control his bowels and other functions

willingly and by his free choice (Erikson, 1959, p. 68). "In such a case, the child may regress, or pretend to be autonomous by over-manipulation of himself, or by a show of shamelessness.

This stage, therefore, becomes decisive for the ratio between love and hate, for that between cooperation and willfulness, and for that between the freedom of self-expression and its suppression. From a sense of self-control without loss of self-esteem comes a lasting sense of autonomy and pride; from a sense of muscular and anal impotence, of loss of self-control, and of parental over-control comes a lasting sense of doubt and shame (Erikson, 1959, p. 68).

The potential social order coming in this period is a sense of law and order.

III. Psychosocial Crisis: Initiative Versus Guilt

In the third stage it is as if the child says, "I am what I can imagine I will be (Erikson, 1959, p. 82)." Roughly, the fourth and fifth year are covered. This is also known as the play age, and generally corresponds to the phallic stage as identified by Freud.

The intrusive mode, dominating much of the behavior of this stage, characterizes a variety of configurationally "similar" activities and fantasies. These include the intrusion into other bodies by physical attack; the intrusion into other people's ears and minds by aggressive talking; the intrusion into space by vigorous locomotion; the intrusion into the unknown by consuming curiosity (Erikson, 1959, p. 76).

Erikson points to three developments which contribute to this

stage: (1) freedom of movement, resulting from the muscular mastery of the previous stage, (2) ability to use language - and ask questions, and (3) expanding imagination. In his independence, the child begins to consider future possibilities. He visualizes himself as grown up, begins making comparisons and develops ceaseless curiosity about size differences, especially sexual differences. This is the time that children look to parents of their own sex as models for possible imitation and see them as rivals for parents of the other sex. "Both the girl and the boy are now extraordinarily appreciative of any convincing promise of the fact that someday they will be as good as father or mother - perhaps better (Erikson, 1959, p. 78)."

Erikson says that "being on the make," describes best the social modality of this stage since it "suggests enjoyment of competition, insistence on goal, pleasure of conquest." This applies to both boys and girls. In boys it implies attack; in girls it has to do with making oneself "attractive and endearing" (1959, p. 78).

A sense of guilt is payment for wicked oedipal wishes and it is in this stage that "the great governor of initiative, namely, conscience, becomes firmly established (Erikson, 1959, p. 80)."

Although this is the base of morality, an overemphasis of guilt can be finally damaging to morality. Erikson says that "conflict

over initiative may find expression in a self-restriction which keeps an individual from living up to his inner capacities (1959, p. 81), "and potential pathology may be found in hysterical denial or "overcompensatory showing off (Erikson, 1963 a, p. 257). "

IV. Psychosocial Crisis: Industry Versus Inferiority

In the fourth stage, it is as if the child says, "I am what I learn (Erikson, 1959, p. 82). " These are the grammar-school years of children in this culture but in "all cultures, at this stage, children receive some systematic instruction. (Erikson, 1959, p. 83). . . " This is the time Freud calls latency. Erikson writes,

. . . before the child, psychologically already a rudimentary parent, can become a biological parent, he must begin to be a worker and potential provider. With the oncoming latency period, the normally advanced child forgets, or rather sublimates, the necessity to "make" people by direct attack or to become papa and mama in a hurry; he now learns to win recognition by producing things. He has mastered the ambulatory field and the organ modes. He has experienced a sense of finality regarding the fact that there is no workable future within the womb of his family (1963 a, pp. 258-59). . .

Through mild coercion from adults, the child develops a sense of industry, a desire to do things well, a satisfaction in completing work and "a positive identification with those who know things and know not to do things (Erikson, 1959, p. 87). " This is a socially decisive stage, since the child is learning to take his

place beside others and with them in the work of society. It is different from the other stages in that the major adjustment is outside the child; there is no "swing from a violent inner upheaval to a new master (Erikson, 1959, p. 88)."

Since the "ego boundaries include. . . tools and skills (Erikson, 1963 a, p. 259)," the danger of this stage lies in failure to identify with the "tool world" thereby bringing on a sense of inadequacy and inferiority, "the feeling that one will never be any good (Erikson, 1959, p. 87)." Other dangers are that the child may "remain prematurely fixed in being nothing but a good little worker," or fail to achieve "enjoyment of work" and "pride of doing" (Erikson, 1959, p. 88).

Technological elements of this period contribute to potential social order.

V. Psychosocial Crisis: Identity Versus Identity Difusion

This is the adolescent period, generally (Erikson says the crisis may last well into the twenties, however), in which the psychosocial modalities are: "to be oneself (or not to be)" and "to share being oneself" (1959, p. 166). This "final assembly of all the converging identity elements at the end of childhood (and the abandonment of the divergent ones)" is of special interest to Erikson (1959, p. 116). He has concentrated on the study of this

period in order to magnify one of his stages under a "clinical microscope." His book, Young Man Luther was written "to show how identity is related to ideology (Erikson, 1960, p.47)." Erikson says that from a genetic viewpoint,

the process of identity formation emerges as an evolving configuration--a configuration which is gradually established by successive ego syntheses and resyntheses. . . gradually integrating constitutional givens, idiosyncratic libidinal needs, favored capacities, significant identifications, effective defenses, successful sublimations, and consistent roles (1959, p. 116).

The danger in this period lies in identity diffusion. It usually happens when the youth is faced simultaneously with the demand for "physical intimacy," decision on "occupational choice", "competition" and "psychosocial self-definition" (Erikson, 1959, p. 123). In this case he may choose to "be nobody or somebody bad, or indeed, dead" rather than "be not-quite-somebody" (Erikson, 1959, p. 132). In that case, there is total regression to a negative identity. In his most recent writing, Erikson looks to a combining of negative and positive identities into an inclusive identity as the answer to conflicts which destroy world peace (1965 b., p. 247).

Ideological perspectives, then, are the elements of social order related to this stage.

VI. Psychosocial Crisis: Intimacy Versus Isolation

This is the first stage of adulthood. Using Freud's term, Erikson says, ". . . it is only now that true genitality can fully develop (1963 a, p. 264). . . ." Erikson himself often links the terms "solidarity" and "distantiation" to the term "intimacy," indicating readiness to declare and protect one's essential psychosocial sphere. The psychosocial modality now becomes: "to lose and find oneself in another" (Erikson, 1959, p. 166). The young adult who is confident of his identity is prepared for intimacy:

. . . that is, the capacity to commit himself to concrete affiliations and partnerships and to develop the ethical strength to abide by such commitments, even though they may call for significant sacrifices and compromises. Body and ego must now be masters of the organ modes and of the nuclear conflicts, in order to be able to face the fear of ego loss in situations which call for self-abandon: in the solidarity of close affiliations, in orgasms and sexual unions, in close friendships and in physical combat, in experiences of inspiration by teachers and of intuition from the recesses of the self. The avoidance of such experience because of a fear of ego loss may lead to a deep sense of isolation and consequent self-absorption (Erikson, 1963 a, pp. 263-64).

Ways of cooperation and competition established at this stage, contribute to a wider social order.

VII. Psychosocial Crisis: Generativity Versus Stagnation

Erikson says this stage is a central one on both the psychosocial and psychosexual schedule since it "encompasses the evolutionary development which has made man the teaching and instituting as well as the learning animal (1963 a, p. 266)." The psychosocial modality is: "to make be and to take care of" (Erikson, 1959, p. 166). The term generativity includes the terms "productivity" and "creativity". Although it primarily refers to "the concern in establishing and guiding the next generation", it does not always require the application of this drive to ones own offspring (Erikson, 1963 a, p. 267).

However, when "such enrichment fails altogether, regression to an obsessive need for pseudo-intimacy takes place, often with a pervading sense of stagnation and personal impoverishment (Erikson, 1963 a, p. 267)."

Patterns of education and tradition established in this stage, contribute to social order.

VIII. Psychosocial Crisis: Ego Integrity Versus Despair

This is the final stage of life. The psychosocial modalities are: "to be through, having been, and to face not being (Erikson, 1959, p. 166)." Erikson says that "a wise Indian, a true gentleman,

and a mature peasant share and recognize in one another the final stage of integrity (1963 a, p. 269). " Such men accept "that an individual life is the accidental coincidence of but one life cycle with but one segment of history. (Erikson, 1963 a, p. 268). "

Fear of death indicates "lack or loss of. . . ego integration (Erikson, 1963 a, p. 268). " Despair, the feeling that there is too little time to start another life, is then hidden in expressions of disappointment and disgust.

Integrity "is the ego's accrued assurance of its proclivity for order and meaning (Erikson, 1963 a, p. 268). " Wisdom is the contribution of this stage to social order.

Erikson Reviewed

Erikson has been writing and publishing widely since 1930. His chief contributions, however, have been compiled in the four following major works:

Young Man Luther (1958)
Identity and the Life Cycle (1959)
Childhood and Society (2nd Ed., 1963)
Insight and Responsibility (1964)

Favorable Reviews

For the most part, Erikson has been well received. Graham (1964) credits him with integrating psychoanalytic psychology.

with the social sciences and points to the wide multi-disciplinary use of his concepts as proof. Perry notes that Erikson himself draws on materials from various sources to demonstrate how they may all contribute to understanding, since of course, "no one discipline can fully explain child development (Perry, 1965, p. 115)."

George Mohr's remarks on Identity and the Life Cycle, seem to sum up the favorable reception and understanding of Erikson's work:

Erikson presents highly significant social and cultural considerations pertinent to personality development in an exceptionally clear and stimulating form. His felicitous ordering of developmental sequences into forms consistent with clinical, sociological, and anthropological observation is imaginatively invested with the flesh and blood of living human experience as sensed by the author. His capacity to interpolate the 'inner meaning' of life experience to the individual is complemented by linguistic and literary stylistic gifts that permit an unusual order of communication to this reader, who always finds the writing interesting and more than occasionally exciting. The considerable confusion attendant on the effort to order into understandable form the numerous environmental influences that operate upon the developing childhood and adolescent organism, and to correlate these with what is known in the biological and psychological spheres, is significantly lessened. The quality of what it is that is contributed to the personality by culturally determined variations in experience is more tangibly grasped in the reading of these papers than in any writing familiar to this reviewer. The author's concept of identity is an extraordinarily useful contribution to a theory of personality development, as is his envisaging of the continuities that operate

throughout the life cycle, illuminatingly suggested in his epigenetic schema and chart. The assembling of these papers in a monograph sets a high standard for the series of publications planned by the editors of *Psychological Issues* (1960, p. 105).

Somewhat Less Favorable Reviews

There are those who criticize Erikson for his "tedious reiteration of phases of the life cycle (Esman, 1965, p. 119)," and others who complain that he looks to children in other times and other cultures for his supporting material (Mackler, 1964; Rubinfine, 1965). Henry (1965, p. 617) says, "Erikson relies too much on his untested associations which has impaired his theoretical apparatus and caused him to fall behind the times."

Young Man Luther seems to bring out the severest criticism. Lowenfeld says it "is occasionally over written, and Erikson chooses very individual formulations whose place within the framework of psychoanalysis is not always evident (1960, p. 111)." McCurdy is skeptical of the "typical psychoanalytic move to explain Luther's theology as being a projection of a conflict with his earthly father. . . His character and talents are revealed as springing from an anal-erotic fundament (1959, p. 202). . ." Winnicott (1965, p. 191), on the other hand, appears to be impressed by Erikson's deep involvement with the subject of identity dealt with

in the book.

The Field of Child Development in Relationship to this Study

In our survey of recent child development research, no studies relating directly to Erikson's conceptions have been found. The research has dealt extensively with: infant care and child rearing practices (Escalona, Sears, Kohn, Sewell, Caldwell); parent-child separation (Bowlby, Gardner, Spitz, Yarrow); parental discipline (Becker and Bronfenbrenner); effects of mass media (Maccoby and Siegel); intelligence (Piaget, Sigel, White); effects of early group experience (Swift and Jersild); and pathology (A. Freud, Spitz); (Hoffman, 1964). Although findings do not tend often to conflict with Erikson's concepts, none is sufficiently tied to them to have any particular meaning.

In the following passage, Anna Freud, one of Erikson's teachers, discusses child development as seen by a child psychoanalyst:

If we examine our notions of average normality in detail, we find that we expect a fairly close correspondence between growth on the individual developmental lines. In clinical terms this means that, to be a harmonious personality, a child who has reached a specific stage in the sequence toward emotional maturity (for example, object constancy), should have attained also corresponding levels in his growth toward bodily independence (such as bladder and bowel control, loosening of the tie between food and mother),

in the lines toward companionship, constructive play, etc. We maintain this expectation of a norm even though reality presents us with many examples to the contrary. There are numerous children, undoubtedly, who show a very irregular pattern in their growth. They may stand high on some levels (such as maturity of emotional relations, bodily independence, etc.) while lagging behind in others (such as play where they continue to cling to transitional objects, cuddly toys, or development of companionship where they persist in treating contemporaries as disturbances or inanimate objects). Some children are well developed toward secondary thought, speech, play, work, community life while remaining in a state of dependency with regard to the management of their own bodily processes, etc. (Freud, 1965, pp. 84-5).

Conclusion

There is much concern presently in the field of behavioral science about predictive and preventative studies. Ernst Kris's writing formulated some ideas which are guidelines for those involved in such studies. In a memorial lecture honoring him, Anna Freud spoke of Kris's "ambition 'to recognize. . . symptomatology before it comes manifest (1958, p. 97). . .'" She said, "He regretted, as we all do, that our assessments are inexact, that our diagnoses usually come too late (1958, p. 96). . ."

Kris proposed the approach of integrating observational and reconstructive data, believing that this study method "will teach us more about typical sequences in child development and. . . in

turn, such additional knowledge will enable us to foresee and anticipate pathology (Freud, 1958, p. 98). . . "

Pye says that Erikson has made the beginning; he "worked at the creative stage in the development of a promising approach. The next stage will have to be one of increased precision in the statement of propositions and increased rigor in empirical testing (1961, p. 220). "

This study is one such attempt.

CHAPTER III

GENERAL METHODOLOGY

The Problem

General Hypothesis

The aim of the research design was to test the hypothesis that a set of social workers with a basic understanding of Erickson's theory of developmental stages could use the theory in a meaningful way to observe pre-school children. The general hypothesis was selected as mentioned in chapters one and two, because of the ever present concern of practitioners in the behavioral sciences to test their theories and subjective judgments by empirical methods. The practitioner, to improve his efficacy, must subject the results of his treatment to objective evaluation. His bases of treatment, i. e. the theoretical framework from which he feels, plans and acts, must also be accessible to objective study, or else he works from a solipsistic base: I myself am judge of what I know and do and of the outcome. Combined with cultural expectations, this can be witchcraft, not science as we understand it today.

Experiments have been conducted over the past 20 years to translate clinical phenomena into terminology acceptable to the empirical researcher. Ten years ago, Eysenck directly challenged

psychotherapies, particularly those based on Freudian theory. Despite refutations of his findings, the issue remains open, primarily because clinical evaluations are subjective and no satisfactory objective measures have been agreed upon among therapists. Recently there has been a spate of studies directed toward measurement of treatment outcome by the use of trait scales developed through factor analysis. The child development theories of Piaget are currently being tested by empirical experiments.

We reasoned that since Erikson's theoretical system, an expansion of Freudian principles, was used in social work practice, establishment of the validity of the theory would bring the Eriksonian conceptual system into the mainstream of present day scientific thought. The task of the group was to devise a method whereby the theory could be made accessible to empirical testing. Much semantic clarification and refinement of the concepts (trust, autonomy, etc.), a constant task of the scientific researcher, was necessary. Greenwood puts it this way:

Scientific language is more accurate and precise than is lay language. This means specifically that its concepts are employed by all with relative uniformity, and that these concepts can differentiate degrees of variability within and between relationships. Such accuracy and precision are not automatic products. Scientists are engaged in a perpetual program of weeding out the ambiguity and vagueness that surround the concepts in their discipline. They constantly seek to clarify the relationships of ideas to terms to referents, and thereby bring an ever closer alignment of the

structure of their language to the reality it purports to describe (1961, p. 53).

Also, improvement of social work practice, particularly in the diagnostic evaluation of children, would result if it could be demonstrated that (a) different workers did not come up with different results, (b) the children could be identified as resolving a particular stage or crisis, (c) an instrument could be developed as a diagnostic tool. A further possibility was the valid use of such an instrument by members of other professions who had not undergone the training in Eriksonian theory. If a child could be determined to be in a particular stage, the instrument might be used to predict where he should be, say, six months in the future.

Terms of the General Hypothesis

By a "set of social workers" we referred to the research group of six second-year students. Understanding of the theory came from course work in human growth and development, and intensive study of Erikson's writings. By a "meaningful way", we proposed to develop an instrument and apply it to a group of children, to come up with something that was reliable and conformed to both Eriksonian theory and social work principles. We developed a series of sub-hypotheses to deal with these separate considerations and to control the variables. These sub-hypotheses

will be stated after a review of the procedures to which they related. Since this is a methodological study, methodology will be recorded in greater detail than in other studies.

Design and Execution of the Pre-test

Since Erikson's concepts are highly abstract, and the researcher's goal included an empirical test, the question arose as how best to make systematic observations. Reliability of the concepts depended as stated above on referents of the concepts being standardized for all observers.

As a first approximation, we wanted to develop a denotative definition by testing referents from Eriksonian literature. Sixty-seven key behavioral phrases were drawn from his writings, as referents of the concepts, such as trust, autonomy, etc., and assembled on a four-page master schedule under headings of each developmental phase. For this test major emphasis was placed on the first four stages since the population was presumably of nursery school age, three to five. Observations were to be blind, without knowledge of the background or age of individual children. Outstanding traits of later stages were kept in mind, for a future decision on whether they would be useful for the study. The schedule included a five-point scale from 0 to 100 with designated points a verbal quantity: nil, mild, average, strong, maximum. The

score recorded by the observer was a pertensity rating, i.e., the intensity of the observed behavior over one minute intervals. Space was allotted for optional descriptive comments and notations of behavior not observed, absent, or which the child seemed unable to perform. Total observational period was 30 minutes.

Prior to the test, training sessions were held to reach agreement on which behaviors would be included under the indices for each stage. We decided on paired observers each rating different subjects, to provide data for inter-pair and intra-pair reliability tests.

An observation period was arranged at the Jewish Community Center, during recreational period in the play yard, to observe the children at their most physically active time. Subjects and observers were assigned at random.

Results of Pre-test

Discussion of the pre-test brought out the following difficulties:

- (1) the schedule was unwieldy and interfered with direct observation;
- (2) certain items such as "sphincter control" were not observable in the setting--other sources of information were needed; (3) activities observed were difficult to relate to the indices, i.e., if a child repeatedly held and released the exercise bar, would this be rated as "gripping or grasping" (Stage I) or "repetitiveness", and

"holding on or letting go at will" (Stage II); (4) the Eriksonian qualities were not adequately divided. For example, further clarification of "industry" behavior as opposed to "inferiority" behavior was needed; (5) the one-minute frequency and intensity ratings interfered with observation; (6) it was not possible to observe all the behavior of active children, particularly in such an active group.

After consideration of alternatives such as (a) to observe fewer traits or categories, (b) to have each researcher observe one child, to divide behaviors to be observed among researchers, or (c) to study and refine the schedule, we decided that difficulties (2), (3), and (4) above could best be overcome by further study and refinement of the schedule and use of teachers, parents and records as sources of non-observable data. Our purpose of testing the theory would best be served by enriching the behaviors and categories with additional Eriksonian phrases. Difficulty (1) scheduling during observation we left to a later decision, and (5) we accepted as a limitation of child studies. It is not possible to observe all behavior. Also, all behavior occurs in context, and the research project could not include or limit the entire context.

One pair of social workers pre-tested the schedule on a random selection of case records. Unwieldiness of the schedule, and active children were not a problem, but the records contained too little information for meaningful rating. They did, however,

contain some "non-observable" data, and we decided to keep them as a source for further tests of reliability over sources, to be described later in a discussion of the related hypotheses.

Operational Definitions

While most scientific definitions are denotative, the task set by the Thesis Committee at this point was to develop and use operational definitions of Erikson's concepts in this instance. Our first step was to identify the significant components for this study, as part of the generating operational definition, to be summarized below. There are two types of operational definitions, the generating and the identifying.

Erikson used a denotative type of definition which in effect was an identifying operation; i.e. each concept (autonomy, shame, industry) could be defined in terms of all usages past and present and the traits specified by these usages.

. . . thus, I feel that discussants would do well to study each key word in its origins, in its usage in various periods and regions and in other languages (1960, p. 44).

We decided accordingly to collect and record items which would be referents of each key word from etymological sources, as well as from Erikson's writings. Each researcher, hence, chose one (or two) key words, restricting study to the four early

stages, because of the voluminous material, the age of the study population, and an examination of phrases and behaviors of later stages. To give some limited examples, identity denotes concern with in-group and out-group, ideology, and future occupation; generativity with productivity and guiding the future generation. Although rudimentarily present, the referents did not closely pertain to childhood. The researchers consulted Erikson's writings and a number of dictionaries to compile a list of synonyms, traits and behaviors and develop a general summary definition of the key word. We included review of Spock because Erikson mentioned this author as one of his own references. We also checked dictionaries of the two major scientific research languages, French and German for meanings, but none of these three sources was used in the final compilations largely because we did not intend the list to include all child behavior, nor were the other language sources, in their primary definitions, as related to children, significantly different from our English definitions. We reasoned that this remained close to Erikson's thought, both in suggesting study of the key words to reach their meaning and his statement:

However, I believe, that there is an intrinsic relationship between ego and language and that despite passing vicissitudes, certain basic words retain essential meanings (1963, p. 274).

Our aim was to refine the key words to these essential

meanings. Major references used are listed in the bibliography.

An example of a compiled master list is the study of autonomy.

Included were (a) origins: auto nomos, self-governing, self-managing; (b) inner feelings: "expects success", "feels free to govern self by own laws"; and (c) specific behaviors: "asks persistently", "chooses", "carries outsized things".

Development of the Questionnaire and Scale

The group compiled the master lists into an eight-page schedule. Our first task of refinement was to eliminate vague terms such as confident, passive, dependent, energetic, which appeared on several lists. Next we delineated sharply between the stages by selecting behaviors and inferential attitudes closest to the essential meaning of the key word. This was done by consensus on the meanings of the key words as defined in dictionaries, and on terms such as dawdling, choosing, initiating action and the behaviors to be categorized under these terms. Also, in deciding what was vital to each stage, we discussed how Erikson differentiated between stages. Erikson's theory is epigenetic--a theory of emergentism as opposed to pre-formism. Emergentism assumes new properties added in each stage of the life cycle. Thus, although the stages overlap, each stage brings new properties. In Erikson's words:

Initiative adds to autonomy the quality of undertaking, planning, and "attacking" a task for the sake of being more active and on the move, where before self-will, more often than not, inspired acts of defiance or, at any rate, protested independence (1963, p. 255).

Following this model we discerned the new properties added in each stage. For example, industry adds to initiative interest in work or learning for itself, completion of tasks, competitiveness, and satisfaction on completion. In the earlier stage (that of initiative) the child is concerned with individual activity, exploring people, toys, his imagination, beginning tasks (being on the move, undertaking and "attacking") without completion and mastery of the task, or working and competing with others being dominant characteristics.

We also differentiated between the negative and positive aspects of each stage. Here we encountered particular difficulty because judging between, for example, autonomy and false autonomy (indicative of practice in self control as conflict resolution as well as being shame behavior) depends on frequency and intensity. Without objective measures of these dimensions, we decided to keep them in mind during observations and test our objectivity against outside sources (records, parents, teachers).

After the above refinements, a questionnaire was drawn up with 30 indices, each of which had its behavioral components, and inferences from behavior not spelled out. Seven summary, or global

questions were added using Erikson's key word as a basis for clinical judgment. The judgment was to include all data relating to stages that the social workers absorbed in course work and agreed on in the discussions of semantics. We considered the central or global question, for example, "How much autonomy does the child show?" to be primary, and the other indices, ancillary to the stage. Analysis of the relationships of the components and the global question would provide information on the force of each question or combination of questions in predicting the stage.

As a quantifying tool we developed a hundred-point scale. Further procedures in gathering data through observation, records and parent interviews were agreed upon and will be discussed below. Validation of Erikson's theory required a test of behavior, feelings and inner states, in accordance with his summary of key words, repeated here for methodological clarification:

In describing the growth and the crises of the human person as a series of alternative basic attitudes such as trust vs. mistrust, we take recourse to the term a "sense of", although, like a "sense of health", or a "sense of being unwell", such "senses" pervade surface and depth, consciousness and the unconscious. They are, then, at the same time ways of experiencing accessible to introspection, ways of behaving, observable by others; and unconscious inner states determinable by test and analysis. It is important to keep these three dimensions in mind, as we proceed (1963, p. 251).

We used the questionnaire as a guide to observing behaviors; we also used the situation in which the child was observed and his overt responses, i.e., crying, sucking, blushing, doing what teacher said, following others, to draw inferences about his experiencing and inner states.

Generating Operational Definition

Earlier, we referred to two types of operational definition: the identifying or testing type and the generating or creative type. Up to this point in recording the study we have concentrated on the identifying type. In a study such as this, which includes clinical judgments, however, conceptualization and the devising of method proceed simultaneously.

The generating operational definition consisted in the above steps (a) identification of the significant components for the study, (b) discussion by each pair and by the group of problems of interpretation, discrepancies and rules for deciding to increase instrument reliability and specification of the physical conditions, materials and semantics, (c) use of a scale of a hundred points with two ends and the middle specified and the intervals understood as being equally divided into segments, plus discussion of this scale as a recording instrument, further to specify conditions in rating on the scale, and (d) a deliberately flexible procedure for using

clinical judgments to arrive at a summary score on the scale.

Aspects of steps remaining are now discussed in further detail.

The Scale

To carry out the statistical tests a quantifying scale was desirable. The group decided on a scale of a hundred points with the intervals understood as being equally divided into segments. The zero end of the scale indicated absence of the behavior, while the 100 end, presence in a high degree. Midpoint was "average" in the trait, but no other points were designated by verbal quantities. A more refined scale, with specific words for degrees of measurement, would more closely standardize observation, but we reasoned that clinical judgments being tested included the individual researcher's tendency to rate persistently high or low. Each ancillary question was given a score, as were the primary or global questions.

Population

Twenty-two children of the original group described as deprived remained at the day nursery. They were distributed throughout three classes. We decided on a more intensive study of one class rather than a cursory study of the larger group as

(1) the pre-tests showed the impossibility of observing and recording a large number of variables or a large number of children; (2) further uncontrollable variables would be added if we tried to observe all classes, e.g., different proportions of study children in each class; teacher variability; change in activity and setting between morning and afternoon classes. The group selected was one afternoon class of 21 children, eight described as deprived in the sociological study mentioned in chapter one, and 13 described as privileged in the same study. Children were assigned to observer teams at random, with each pair assigned at least one underprivileged child. Observations were made blind, with no access to records or teacher information which would identify the children as deprived or privileged.

Situation and Time

Children were observed for four fifteen-minute periods, within the duration of one month. Pre-tests of 30-minute periods showed no noticeable difference in activity between 15 and 30 minutes in one setting. Each of the four observations would take place, if possible, in a different setting; yard, playroom, crafts shop, or snack table, in order to observe the child in a variety of situations. It was not possible to observe every child in each situation, but we hoped to minimize the effect of "good and bad days"

and seeing the child only at his favorite or least pleasant activity, by observing under varied circumstances. Unobserved experiences, pertinent to the study, such as how the child behaved when mother left, were filled in from consultations with the teachers.

Behavior observed outside the official study time was to be discussed with the co-observer if it radically changed the researcher's rating of the child. Otherwise no other discussion of the subjects was held. Only in one instance was discussion necessary. On first observation the child did not speak, but later was observed to talk.

After completing the four observations, each member made a summary rating of the child. This summary was to be the final clinical judgment, rated on the scale. It was deliberately left up to each to decide how to arrive at this score, whether through averaging or re-rating, as a principal variable for reliability tests to be made. All observations, recorded material used and interviews were limited to the study period of two months.

Records

Since study and control groups were observed blind, use of records and interviews followed observations. The research teams read the records and rated on the questionnaire scale individually. The only discussion related to whether each researcher had rated

on all questions. Those left blank by one of the pair and not the other were related to information in the record. If the rating had been made by inference, no change was made, but if the rating was based on behavior prior to the study period, it was changed.

Interviews

Training sessions were held to standardize presentation of the questions to parents. Explanations of the questions with samples of specific activities in which a child might, for example, "repeat the same thing again and again" were developed. The questionnaire was pre-tested on non-study mothers to uncover ambiguities and develop interpretations to non-Eriksonian oriented parents. The mother was selected as prime informant, because this gave greater control over the variable of fatherless families, and the mother was presumed to have more knowledge of the child's specific behaviors. Appointments were made to interview the parents at home.

Only one of the research pair presented the questionnaire, but each scaled separately during the interview. The other team member presented the questionnaire with the next family, all pairs following this practice of alternating the presentation. The same pairs remained teams throughout the project as we reasoned that although varied combinations of pairs would provide further data

for reliability studies, our limited time prevented analysis of numerous combinations.

Statement of Hypotheses

The six summary ratings for each child were used to test the issues to be demonstrated stated in the opening of this chapter.

(1) "Will different workers come up with different results," was treated in two sub-hypotheses of the general research hypothesis.

These stated in null form were:

H₀: There is no difference between two Eriksonian-oriented social workers in their observation of the same pre-school children.

H₀: There is no difference among sets of Eriksonian-oriented social workers in their observations of different pre-school children.

Statistical comparisons of the ratings given by each worker were made to test these hypotheses. Reliability over sources was tested by comparing scores given from records, observations, and interviews. The sub-hypothesis was:

H₀: There is no difference between the observations and records or between the observations and parents or between the records and parents.

Whether children could be identified as resolving a particular stage, was tested by comparing the scores given for each stage with the assumption that the child would rate differently in each stage.

The quantification of Eriksonian concepts enables the charting of a child's developmental trend and supports Erikson's theory that a child must resolve the earlier stages before subsequent stages can be resolved.

H_0 : Scores of Stage I = II = III = IV

H_1 : Scores of Stage I > II > III > IV

Using the scale brought out that raters found that with certain questions a low score indicated greater development. These questions were noted and it was decided to give them reverse scores in computing a developmental average. An example was number four: How upset does he get when mother leaves him? Other questions with reversed scores were 5, 6, 7, 8, 17, 18, 19 and 20.

Our third question, whether an instrument could be developed as a diagnostic tool, was tested by the above comparisons and also by a measure of internal validity, comparing component questions against the global questions. Stated in null form, the sub-hypothesis was:

H_0 : There is no relationship between global and selected questions.

Tabulation and Statistics

Each pair of observers tabulated its own judgments. The inferential statistics were done independently with one person calculating and a second, checking. Non-parametric statistics

were planned because the distributions were unknown and because the scale had some ordinal properties. We used a non-parametric t test, a more conservative test than the parametric t test.

In preparing the report, responsibility for each chapter was assigned to one individual, with all members making suggestions for the last chapter and cooperating in collating chapters.

Since this was a beginning study directed toward testing a complex theory with many variables and semantic difficulties, further hypotheses developed out of inspection of the data. These will be treated in the following chapter.

CHAPTER IV

FINDINGS

Description of the Children

The project was originally set up to study two groups of pre-school children with Eriksonian concepts as the model base. The experimental group of eight was to be described as the culturally deprived, and the control group of 13 was to represent the advantaged children. However, it was found after all the data were tabulated, that to proceed with this dichotomy would not be appropriate due to other uncontrolled variables. Within the control group were handicapped children (retardation, brain damage, physical defects, and emotional upset) which would distort the differences in the two groups. There was also one child in the experimental group who was handicapped.

Therefore, the children were divided into three groups: (1) the "normal" children from advantaged homes, (2) the "normal" children from culturally deprived homes, and (3) the handicapped children from both of the above types of homes. Each group had an $N = 7$ for a total $N = 21$.

Hypotheses

The study attempted to prove three general hypotheses. Another hypothesis (measuring movement in pre-school children over time) had to be excluded because of lack of time. What follows is an examination of each main hypothesis and the specific hypotheses subsumed under them.

Hypothesis #1

A set of social workers with a basic understanding of Erikson's theory of developmental stages can use the theory in a meaningful way to observe pre-school children.

We first wanted to determine the relationship between the positive and negative global questions. For example, we thought of "autonomy" (positive) versus "shame and doubt" (negative) as being on a continuum. A child high in autonomy was expected to be low in shame and doubt. Therefore, our hypothesis was stated: "A high positive score would mean a low negative score and vice versa," and a high negative correlation was expected. The first stage was not tested since we had eliminated the negative question concerning mistrust. The other three stages showed the following Spearman rank correlation coefficients (ρ) in Table I.

We were searching for any bias the handicapped may have given the first correlations. The social workers thought that it was

TABLE I

RELATIONSHIP BETWEEN POSITIVE AND NEGATIVE GLOBAL
QUESTIONS BASED ON SOCIAL WORKER
OBSERVATIONAL MEANS

Social Worker Pairs	Stages		
	II	III	IV
1	- .10 - .90*	+.40 +.30*	-.14 +.30*
2	- .86 -1.00*	-.74 -.57*	-.57 -.90*
3	-1.00 -1.00*	-.06 +.20*	+.21 -.68*

* Handicapped children excluded.

difficult to observe, say, shame and doubt in a handicapped child, and so the child was not given a high negative score. There was an increase in negative correlations when the handicapped were excluded, but the conclusions are of uncertain overall significance. Based on the coefficients, the hypothesis was not proven true.

However, there were significant implications with respect to Stage II. The hypothesis could be restated: "As the child grows older and passes from one stage to the next according to his age, a high positive score would mean a low negative score (and conversely) on stages the child has passed through." All of the children in the advantaged and deprived groups were between ages three and five thus placing them in Stage III. Therefore, according to the above hypothesis, Stage II had been passed through (and correlates highly)

and Stage III was being worked on (and correlates little).

The decision was made, despite the nonsignificant results, that the positive global questions (i.e., trust, autonomy, initiative, and industry) would be used to test the first main hypothesis. We eliminated the negative questions and preferred to view the children from a positive aspect.

Next, we wanted to determine which set of the data should be used as a basis for statistical measurements. We could not run complete tests on all of the data, because of time, and needed to conclude whether to use (1) observations, (2) records, or (3) parents. We expected to find that the observations would better represent our study since all observations were based on our perceptions of the children within an Eriksonian framework. The records had proven to be inadequate and resulted in our not answering many questions. We did not expect the parents to correlate significantly with the observations since their understanding of Erikson would be nil. Our null hypothesis was stated: "There is no significant difference between the observations and records or between the observations and parents or between the records and parents."

As a first approximation, Wilcoxon's were computed between these three groups of data since sign tests did not reflect quantitative variances. Seven questions were used--the four positive and the three negative global questions. Since many questions were not

answered from the records and since one parent was not interviewed, the Wilcoxon's were inconclusive. Briefly they showed the null hypothesis for observations and records accepted 11 times and rejected once; for observations and parents, accepted ten and rejected three; for records and parents, accepted five and rejected once. Thirty-two Wilcoxon's could not be computed.

Rho was then calculated for each social worker pair using only the four positive global questions. There were 12 coefficients to test each null hypothesis with Table II summarizing the results.

TABLE II
RELATIONSHIP BETWEEN DATA SOURCES

Data	Range	Coefficients			H ₀
		Md	df	p	
Observations/Records	-.31 to +1.00	+.82	5	<.05	Reject
Observations/Parents	-.35 to +.98	+.52	5	>.05	Accept
Records/Parents	-.29 to +.67	+.34	5	>.05	Accept

Since the null hypotheses were with respect to zero correlation, it would appear that professional observations were significantly reliable, whereas parental responses should be regarded with skepticism. The records were not compiled with Eriksonian concepts in mind but contained sufficient information nevertheless

for an Eriksonian analysis.

Partially based on these tests, the observations were chosen as the primary source of data. Although records correlated highly with observations, the records were too incomplete to be useful. The high correlation may have also been influenced by the order of data collection, i.e., observations preceded the records' study. The parents, also subsequent to observations, correlated low with observations. This could be due to parental bias toward their children, inability to compare their child with the "average", and lack of knowledge of Erikson.

The correlations were more significant for Stages II and III with the first and fourth stages showing the lowest coefficients. (Mean coefficients for Stages I through IV were, respectively, +.42, +.62, +.53, +.29.) Despite the parents' low correlations with observations and records, their personal knowledge of their children did provide some important insights which will be mentioned later. Tables IV and V further illustrate parent reliability.

The intra- as well as inter-pair reliability pointed to two more specific null hypotheses.

- (1) There is no difference between two Eriksonian-oriented social workers in their observations of the same pre-school children. (intra-pair reliability)
- (2) There is no difference among sets of Eriksonian-oriented social workers in their observations of different pre-school children. (inter-pair reliability)

Intra-Pair Reliability

Again we used the Wilcoxon test as an initial measurement. The results were inconclusive but were indicative. At the .05 level for a two-tailed test, the critical value for $N = 7$ is 2. Social Worker Pair One accepted 15 and rejected two null hypotheses (for the four positive and three negative global questions). Pair Two accepted six and rejected eight. Pair Three accepted 14 and rejected four. Fourteen Wilcoxon tests could not be computed. The Wilcoxon tests supported our previous decision not to rely on the records with seven acceptances and seven rejections within the three observer pairs. Intra-pair reliability on the observations showed 16 acceptances and five rejections. With parents, 12 acceptances and two rejections were shown. High intra-pair reliability was expected on the parent interviews since observer judgments were made essentially from the parents' words and not more diverse behavior.

To take a closer look at the intra-pair reliability, rho was calculated. This test examined only the four positive global questions and Table III illustrates the results.

In examining the coefficients in greater detail, it was determined again that the parental data were not as reliable on Stages I and IV as with the two middle stages. The lack of reliability is transmitted to the interviewers (who must mark the answers), and

TABLE III
INTRA-PAIR RELIABILITY

Social Worker Pairs	Observations	Data	
		Records	Parents
1	+ .57	+ .51	+ .77
2	+ .56	+ .47	+ .67
3	+ .84	+ .97	+ .84

consequently causes them to be less reliable. However, generally the parents showed more reliability than observations and records, due again to less ambiguity in understanding words than in understanding behavior.

The records were almost as reliable as the observations. But this, as stated before, could be due to prior observational knowledge of the child. Many records had only a paragraph or two in them and were difficult to use for our Eriksonian-oriented questions. The children with greater problems--emotional, brain damaged, etc.--had much more voluminous files. There was no analysis done of the relationship between larger files and higher correlation.

The reliability of Social Worker Pair Three was much higher than the other pairs. Their suspiciously high coefficients were discussed to determine whether they had reached consensus on some

of their perceptions. It was ascertained that Pair Three arrived at their scores independently. Pair One had talked about the cases most, and Pair Two, which had the least intra-pair agreement, was somewhere in between. Actually, discussion was minimal for all three pairs, but occasionally confusions were resolved before a final judgment was made.

In investigating the coefficients for the observations, Pair Three showed a significant relationship (with $N = 7$) at the $p < .05$ level. The other two pairs were not reliable at that level.

It was a very complex matter to ascertain, at this point, why the reliability was not higher. However, is the reliability achieved high enough? At what level of confidence should social workers with similar training be expected to agree on clinical judgments? We would tentatively conclude that the discrepancies in judgments were not unusual for this field.

We might speculate that higher reliability was reduced by our different understandings of Erikson, inadequate training sessions, confusion over what a piece of behavior meant, the tendency of one social worker to be more generous than another in rating, the scale used, the small number of observations, or the lack of precision in the concepts themselves.

We found that as a pair observed a child more times, they came closer to each other in agreement. The variations in rating

scores for a given child were likely to be very far apart after the first observation. As the number of observations grew, the variation decreased. Whether the variation would continue to decrease is something for additional research, but would be expected. It is much simpler to rate a child 1-10 or 1-4 than 0-100. However, we desired more precision and wanted Erikson's theory subjected to a conservative and scrupulous analysis.

We would want to be very careful about categorizing a child via four observations and this points to the importance of more observations as well as information from case records and parents. Since the coefficients were not high enough, we must be dubious about the statement or conclusion of any single social worker.

Because the correlations of two of the three pairs was not high enough at the .05 confidence level to use their independent, individual observations, the null hypothesis must be rejected. In the remainder of the study where appropriate the means of observations will be used on the grounds that the means of paired or multiple observations are closer to the universal mean than any of the observations on the average, and can be treated arithmetically. Tests of inter-pair reliability and others justified pragmatically the use of central measures.

Inter-Pair Reliability

It was important to ascertain whether different sets of social workers could use Erikson in a consistent way. To accept H_0 could imply that other workers might reliably observe pre-school children. The extrapolation to teachers, nursery school aides, and others who deal with children could also be of significant value.

The extension of the median test was used to give an initial idea of reliability. Tests were done on three sources of data: observations (global questions); observations (selected questions); and parents. The median of the corrected scores (raw score divided by age) of the entire group was used. The chi squares for these three sources were .429, .429, and .286. With d.f. = 2, the probability under H_0 that chi square would be equal to or above these figures would be between .90 and .80. Thus, H_0 was accepted. However, since the theoretical frequency was so low (3.5 for each cell), the test is in the sense of the sum of squared differences. P is obviously high enough to accept the null hypothesis at the .05 level for the test, but reliability was in doubt.

Therefore, the extension of the median test was done with expanded data. The corrected ratings of all the children for Stages I-IV were ordered ($N = 84$) with a common median of 8.93. With d.f. = 2 and cell expectations of 14, $X^2 = 3.70$ was calculated.

The probability of occurrence was between .20 and .10. Assuming a level of significance at .05 or less, the null hypothesis was not rejected. Pair Two rated their children higher than the other two pairs, and the chi squares were increased because of this. The reasons for this include (other than possible general overrating) two advantaged children and two handicapped children who were rated at the top of their respective groups. Further examinations of factors will be undertaken when the third general hypothesis is examined.

The selected questions, utilized to measure inter-pair reliability, were used to test another question. Could we accurately and reliably perceive children with only the clinical, global questions? Group consensus based on Erikson's assessments determined which would be our selected questions: Stage I-1, 2, 8; Stage II-10, 16, 20; Stage III-25, 27, 29; Stage IV-32, 33. "Parent" will continue to reflect the parents' answers to the four positive global questions. Table IV illustrates the association between global (clinical) and selected perceptions as well as between global and parent.

Rho for the entire sample of $N = 21$ (using corrected scores) was $+ .93$ for the global-selected questions and $+ .63$ for global-parent. The $+ .93$ is significant at the $p < .01$ level (as is the mean coefficient of $+ .70$) and therefore rejects the null hypothesis that there is no relationship between global and selected questions.

TABLE IV
RELATIONSHIP BETWEEN GLOBAL AND SELECTED
QUESTIONS AND BETWEEN GLOBAL AND
PARENT QUESTIONS

Groups	Rho from Raw Scores of Stages							
	Global-Selected				Global-Parent			
	I	II	III	IV	I	II	III	IV
Advantaged	+ .97	+ .72	+ .99	+ .93	+ .50	+ .29	+ .78	+ .68
Deprived	- .21	+ .43	+ .86	+ .93	- .09	+ .09	- .09	- .14
Handicapped	+ .85	+ .07	+ .87	+ 1.00	+ .22	+ .10	+ .64	+ .54
for total group N = 21								
				+ .70*				+ .30*

* Means reflect direction and attenuate coefficients.

Consequently, there is a short cut to observing children.

Tables VII and VIII also illustrate the similarity between selected and global questions. It is expected that the global and selected perceptions represent the same population of question meanings. Using a two-tailed test, $t = .19$ for the global-selected means with $p > .50$, H_0 was accepted. Likewise, $t = 2.07$ for the global-parent means with $p < .05$, H_0 was rejected.

The global-selected coefficients in Table IV as a whole are high but there are exceptions. It is noted that coefficients are lower for the deprived group, and this extends to the global-parent

coefficients. This could be improved upon by statistically correlating all questions to determine which have the highest associations. Our selection by consensus was necessitated by a time factor. The relatively low coefficients in the deprived group could indicate other variables, and this will be elaborated on under the second general hypothesis. There are also other questions which will arise later concerning similarities and differences of the global, selected, and parent perceptions. At this point, not only did we feel justified to consider the global questions as the most accurate and reliable way to perceive a child, but the sign test supported our conclusion.

The sign test was employed to test the hypothesis that, "The quantification of Eriksonian concepts enables the charting of a child's developmental trend and supports Erikson's theory that a child must resolve the earlier stages before subsequent stages can be resolved." Thus, H_0 would say there is no difference between Stages I, II, III, IV. H_1 is: $I > II > III > IV$.

Table V again points to additional study needed on the selected questions. The global significance levels in general support Erikson's theory and would indicate that chance factors are not operating. If we reduce the precision by testing $I > III$, then $p = .001$. Eliminating the handicapped children from N decreases the probability in two-thirds of the significance levels, but the specific effects of the handicapped on p are inconclusive.

TABLE V

RELATIONSHIP BETWEEN STAGES I, II, III, AND IV

Data	N*	Significance Levels (one-tailed tests)							
		I > II		II > III		III > IV		I > III	
Global	21	.095	<u>A</u>	.021	<u>R</u>	.013	<u>R</u>	.001	<u>R</u>
Selected	21	.192	<u>A</u>	.001	<u>R</u>	.820	<u>A</u>	.001	<u>R</u>
Parents	20	.032	<u>R</u>	.324	<u>A</u>	.588	<u>A</u>	.058	<u>D</u>

A = Accept H_0 at .05 level

R = Reject

D = Doubtful

* N is reduced by ties

Another way to test the association between the stages is to compute rho between the children's rank in two adjacent stages. This does not test $I > II > III > IV$. However, we would expect as a set that a child high or low in one stage would be proportionately high or low in the next stage. Rhos showed associations for the global judgments of +.86 between I and II, +.78 between II and III, and +.70 between III and IV, all significant at the $p < .01$ level. The declining trend is probably due to the handicapped who do not follow the pattern typical of the other groups. (See Figures 1 and 2, pages 78 and 79.)

This finding is consistent with Erikson's general theory of crisis resolution. While not one of the major hypotheses, positive

results have strengthened confidence in the related theory, whereas negative results would have created difficulties in interpretation.

The final specific hypothesis for our first general hypothesis is an attempt to test Erikson's impressions that, "As children advance chronologically, they advance developmentally." Basic relationships to be discussed are in the following table.

TABLE VI
ASSOCIATION BETWEEN AGE AND RAW SCORE

Data	Group Coefficients			
	Advantaged	Deprived	Handicapped	Total Group
Global	-.36	+.93	+.85	-.13
Selected	-.21	+.90	+.85	-.03
Parents	-.03	-.12	+.78	-.37

We did not anticipate the high rank correlations we received for the deprived and handicapped. Erikson had said that the age range for each stage was a very rough approximation. We would expect correlations to become higher if the sample involved a larger disparity in ages. However, in the advantaged group, the ages ranged from 3 years 11 months to 4 years 11 months with $\bar{X}$ = 4 years 5 months. The deprived group ranged from 3 years 9 months to 4 years 10 months with $\bar{X}$ = 4 years 4 months. The

significantly high correlations ($p < .05$) for the handicapped are more understandable since ages ranged from 4 years 8 months to 7 years 3 months with $\bar{X} = 6$ years 4 months.

The low coefficients for the advantaged can be explained by looking at three exceptional children who were the youngest of their group of seven and conversely had the highest developmental scores. Rachel¹ was $4\frac{1}{4}$ years old, an only child, and came from an upper middle class Negro family who lavished her with love and learning situations. Henry, age 4, was above average intellectually, verbose, a "boy" gentleman, and had one sibling. His parents were both professionally educated people although Mother did not work. Rose, age 3 years 9 months, came from an intellectual, religious family, had three siblings, was bright and skillful in her interpersonal relations.

The total group correlations showed no relationship, and this was due to ranking the young, advanced children with the older, handicapped children. Further research is indicated, but we would expect that as the age range increased and the proportion of handicapped children were diluted or even eliminated from the test that high positive correlations would result.

There were a sufficient number of statistically significant

¹ All children's names will be pseudonyms.

findings under the first general hypothesis to justify its acceptance, with reservations. Either consensual judgments should be used, as commonly practiced in social work through staffings, or individual reliability improved. There is correspondence between the Eriksonian model and empirical observations, and there is evidence of internal consistency, but the validity is not as high as desired, based on this single study. A rationale is needed for predicting the exceptions to the general rules found in a considerable proportion of cases.

Hypothesis #2

Erikson's theory of developmental stages can be used to differentiate between advantaged, deprived, and handicapped children.

We would expect to find that H_0 would be rejected in favor of H_1 : $A > D > H$. (Advantaged, Deprived, Handicapped) The picture that Table VII gives is that there is a difference between the handicapped and the other two groups.

Now, Table VIII will examine the significance of difference between the three children's groups.

Since there is not a significant difference between the advantaged and deprived, which is contrary to what we expected, we can suggest that the pre-school program was of benefit to the deprived. It would be interesting to determine the association between the

TABLE VII
MEANS OF CORRECTED SCORES

Groups	N	Md. Age	Mean Scores		
			Global	Selected	Parents
Advantaged	7	4-4	46.5	44.1	63.5
Deprived	7	4-6	44.5	41.8	* 52.4
Handicapped	7	6-8	21.5	24.8	* 30.1
Total Group	21	4-8	37.5	36.6	** 48.5

* N = 6

** N = 20

deprived child's duration in the program and his developmental level. The tests could also suggest some real strengths in the parents of deprived children.

Despite the low means of the handicapped, it should not be inferred that the program did not benefit them. For example, Emma, age 5 years 5 months, could not walk or talk when she came several months before. She now had a vocabulary of several words and could walk almost as well as any child her age. Paul, age 6 years one month, was also purported to have made significant gains, though he came as a child with severe emotional problems and brain damage under five kinds of medication.

The parental overratings or social worker underratings were

TABLE VIII

RELATIONSHIP BETWEEN THE THREE GROUPS IN RESPECT TO
GLOBAL, SELECTED, AND PARENT PERCEPTIONS

Groups	Global				Selected				Parents			
	t	p	Exact p	H _o	t	p	Exact p	H _o	t	p	Exact p	H _o
A-D	.27	> .50	.36	<u>A</u>	.33	> .50	.36	<u>A</u>	*1.52	> .05	*.31	<u>A</u>
D-H	5.93	< .001	.01	<u>R</u>	6.70	< .001	.001	<u>R</u>	*3.68	< .005	.02	<u>R</u>
H-A	3.31	< .005	.01	<u>R</u>	3.69	< .005	.01	<u>R</u>	6.18	< .001	.001	<u>R</u>

One-tailed t tests

* N = 13; otherwise N = 14

not only exemplified by Table VII and Table V, but also by the following graphs. It is interesting to note that Table VII indicates the

Figure 1. Global perceptions for the advantaged, handicapped, and deprived.

advantaged parents rate their children much higher than do parents of the deprived or handicapped. Perhaps the parents of the deprived are more realistic, or lower their ratings due to their inferiority feelings toward their environment, themselves, or their children. The parents of the handicapped group may evidence their knowledge that their child does have problems, rather than denial of problems.

Figure 2. Parents' perceptions for advantaged, handicapped, and deprived.

The children also may show behavior differences between home and peer group settings.

The elevated ratings of the parents may be due to the children's increased security in the home, social worker bias, ambiguous questions, parental overemphasis of the child's enhancement from nursery school, or parental hesitancy to rate their children as low as they should be. We suspect the latter reason.

The rationale for using raw scores, rather than corrected scores, on the graphs is based on the principle that Erikson's

Figure 3. Means of global, selected, and parents.

stages do not progress in arithmetical proportion with a person's age. There needs to be a weighting system to correct for the errors that arise from both corrected scores and raw scores. Erikson's first four stages cover about 11 years whereas the last four cover the balance of life--say 60 years. Likewise, a child of six months who is essentially in Stage I with a total raw score of, say, 60 would have a corrected score of 120 ($60 \div .5$). Compare this to a 10 year old who has a total raw score of 380 and a corrected score of 38 ($380 \div 10$). We did not delve into the complex and time consuming

problem of weighting and justified the simplified methods by the relatively small age range, as a first approximation.

The most straightforward explanation of failure to distinguish between advantaged and deprived is that there were no significant statistical differences to be distinguished. In this case, it is not a test of Eriksonian developmental hypotheses.

When we take a look at the next general hypothesis (which is actually an extension of this one), we will see other possible reasons why there was no significant differentiation between the advantaged and deprived groups. This will be explicated through a few diagnostic comparisons on certain children.

Hypothesis #3

Erikson's theory of developmental stages can be used diagnostically as a manifestation of a child's developmental level and/or problem area.

This hypothesis leads to a search for an instrument which can discriminate between children and thus enable earlier discovery of problems and their treatment. This is a very complex hypothesis to endeavor to prove and what we have discovered was highly provisional. First, we wished to determine if the stage of a child could be determined, or the stage a child has last resolved. Table I, which was discussed earlier, may supply insights into

the stage a child is in through the correlation of negative and positive questions.

It may be said that the person's age is sufficient to place him in a stage. For example, a typical boy of 15 who has never resolved the crisis of trust vs. mistrust is not necessarily in that earlier stage. He has moved on despite his incapacibilities to resolve any crises. However, we are not really interested in whether he is in Stage I or Stage V, but rather where he is developmentally. Where is the delinquent fixated? Which stage, if any, predetermines his propensity towards delinquency?

In examining Figure 1, we could arbitrarily say that since any developmental crisis is on a continuum, 50 represents the demarcation line. Therefore, when the child has progressed above 50, he is then on the plus side of the crisis. As a child moves above 50, he concomitantly moves into the subsequent stage. (It is recognized that a child is never solely in one stage.) Figure 1 would then demonstrate that the advantaged and deprived groups are in Stage III, and the handicapped group is still in Stage I. The only thing wrong with this is that the handicapped are not in Stage I and despite their less than 50 scores, they are going on to other stages. Consequently, Figure 1 does better when it is used to clarify which stages have been resolved--not which stage a child is in.

What is a proper resolution score? Although 51 is above the

division line, it should not be assumed that a child with this score has resolved a given stage. Much additional research is needed to pinpoint what a "resolution score" is. The $\bar{X}$ of 13 children above 50 in Stage I was 65.6. Nine of these same children were above 50 in Stage II and the $\bar{X}$ was 63.8. The $\bar{X}$ in Figure 3 reflects $N = 21$ and is distorted because of eight children who were below 50 in Stage I, and so on. Without deciding what a "resolution score" is, we can nevertheless look at some examples of children in Table IX.

TABLE IX
DEVELOPMENTAL GLOBAL RAW SCORES FOR
SELECTED CHILDREN

Child	Age	Group	Stages			
			I	II	III	IV
Jacob	4-9	A	64	67	47	39
Allan	4-8	A	43	38	33	24
Alice	7-2	H	66	65	60	47
George	6-8	H	26	29	43	53
Betty	3-11	D	60	34	18	11
Andy	4-11	D	60	64	64	44

It would appear, by tentative approximation, that Jacob has resolved the first two stages and is now working mainly on the third. The diagnostic statement on Jacob reflects a healthy emotional, environmental, and physical situation.

George, who is emotionally and physically handicapped, defies our hypothesis that $I > II > III > IV$. In fact his scores are inverse to this. Rex, a retarded boy, has a similar pattern. Also notice Figure 2 which tends to support the handicappeds' inverse pattern. Does this indicate some handicapped children can resolve subsequent stages if previous ones are unresolved? None of the advantaged or deprived children had an inverse pattern. Can we then hypothesize that an inverse pattern suggests problems? Or could it represent overcompensation in a later stage?

Alice is a retarded child whose hyperactivity is controlled by medication. This medication brings up another point. Since our observations were done with no knowledge of a child's situation, we would not be aware of medication or other latent unusual circumstances. Paul was another child on medication whose scores were misrepresentative. Of course, in practice a social worker should not be ignorant of these extraneous vicissitudes. Alice exemplifies a child moving along developmentally very well. However, the diagnostic statements indicate parental rejection, poor peer involvement, and impulsive behavior. Paul's diagnostic statement compared more accurately with his oscillating pattern.

To really know whether developmental scores can intimate something diagnostically will require extensive empirical studies. Our small study strongly suggests the diagnostic possibilities.

We have discussed some of the superior children previously. Table VII has shown the global means of the various groups. Allan, an advantaged child, had a score of 29.1 which was 17.4 below the advantaged group's mean. Table IX reflects his global raw scores, indicating that no stages had been resolved. His diagnostic description suggests his problem. Allan was small, laconic, vacillating, and had poor peer relationships. He avoided adults and was suspected of imitating his older retarded sister, thus retarding his own development.

Emma had the lowest corrected score, 6.0, of the 21 children. Her severe handicaps were largely undiagnosed, but brain damage, emotional problems, and retardation were all possibilities.

Betty, a deprived child, had a score of 31.3, 13.2 below her group's mean. Her scores in Table IX suggest trouble in Stage II. Her diagnostic description indicated a low income home and six siblings, most of whom were handicapped in various ways. She was quiet, observing, and passive.

Iris, age 4 years 10 months, had a score 13.5 points below the mean of her advantaged group. Her pattern also pointed to trouble with autonomy vs. shame and doubt. She was a quiet, languid child who avoided the group activities and occasionally sucked her thumb.

Randy, 4 years 4 months, scored 20.8 under his advantaged

group's mean. He was withdrawn, inactive, and shy. He seemed at least of average intelligence. Here was an instance where the mother provided further insights and directed our attention to another difficulty with brief observational periods. Although the mother overrated her child as did every other parent, she did indicate that Randy had been going through an extremely defiant period for the past few months. Prior to this time, Randy had been a model child. So the well-adjusted child observed in a temporary regressive state is not justly represented developmentally. Of course, it was also significant that the regression manifested itself quantitatively. What we really did not know is whether the regression was temporary or the sign of a deeper long-term problem. This is why observations periodically over time would be very important.

We would tentatively conclude that the quantitative developmental level of a child has indicated something diagnostically. We have seen where deficiencies in the advantaged group have shown up. This may also partially explain why our hypothesis of $A > D$ was not proven.

The quantitative score has been in line with more extensive qualitative profiles. A quantitative deviation has discriminated between problem areas and normal or superior development.

Norms based on a sufficiently large population and more

sophisticated weighting techniques, if not specific items, would give no less satisfactory results.

Both the scale score and Eriksonian theory were shown to be empirically useful in directing attention to some problem associated with the concept of stages. The type or locus of problem is of course a subject for further inquiry.

Summary

The findings of this research project provide tentative support to the three general hypotheses. We sought to discover (1) whether Eriksonian concepts could be used meaningfully to observe pre-school children, (2) whether groups of children could be differentiated, and (3) whether the instrument could be used diagnostically. Although results were inconclusive, they were promising.

Our largest concern was whether similarly trained social workers could reliably observe children. The content validity of the questionnaire was of significance here and further analysis of the various criteria is warranted. The findings under the second hypothesis and especially the third justified an inference of potential validity. That is, the questionnaire appeared to measure what it set out to measure. We were able to quantify a child's developmental level and uncover clues of his growth or lack of growth. Independent diagnostic confirmation supported this quantification. One

significance of this is that once aware of developmental deficiencies in a child, emphasis can be appropriately placed and treatment undertaken. The possibility is also indicated that a relatively simple instrument can be developed for referring children with problems, some of which are unrecognized by parents or other sources.

The questionnaire is not an esoteric one, but its applicability for teachers and others is yet unknown. We realize the importance of teachers, parents, aides, and others in this endeavor to judge children's levels. The teacher, for example, will know a child well by way of the child's school environment and how he interacts with others. The parents can provide hints to concealed characteristics and also guard against an outside person underestimating a child.

It is realized that Erikson's theory is much more complex than our findings indicate. However, we have tried to keep the study at a manageable level. In keeping the project on a researchable level, we have not been able to suppress a multitude of queries which have arisen from the study. The next chapter will outline some of these.

CHAPTER V

CRITIQUE

Summary

This was a basic research study which marked the first attempt we could find to operationalize and subject Erikson's concepts to empirical study. The research was undertaken in part because of conflict of opinion about the reliability of psychoanalytic theories such as Erikson's. Since Erikson was widely used in social work practice it was felt it would improve practice if certain hypotheses related to his theory could be demonstrated. It was further felt that if a measuring instrument using Erikson's concepts could be developed, its use could be extended to others involved with children.

Such an endeavor was consonant with the emphasis contemporaneously placed by the various "helping" professions on predictive and preventive studies. Concomitant with the empirical study was an inquiry into the benefits which accrue to culturally deprived children through involvement in a pre-school program.

A schedule was developed using Erikson's developmental concepts. A group of six social work students, operating in pairs, used this instrument as they gathered data from three sources--

field observations, case records, and parent interviews. Data gathered from these sources were the basis for statistical analysis.

The population observed were 21 children involved in a pre-school enrichment project. The children were divided equally into three groups: children from advantaged homes; children from deprived homes; and handicapped children from both types of homes.

Three general hypotheses were developed to answer the questions--could a group of social workers, using Erikson's developmental theories as their frame of reference, observe children with similar results; could children be identified as resolving a particular stage or crisis; could an instrument be developed as a diagnostic tool? A number of sub-hypotheses were developed to test the general hypotheses.

Resumé of the Findings

Findings, while not apocalyptic, were suggestive and appeared to substantiate Erikson's theory. Perhaps more important for this initial attempt at such a research endeavor many issues and questions were raised, and shortcomings disclosed, which might well direct additional research in this area.

Tests of the first hypothesis indicated that Erikson can be quantified and used to observe behavior. A major difficulty was the problem of low observer reliability.

Additional findings related to the first hypothesis indicated that by using selected, global questions, mean clinical judgments based on short-time observations were reliable and consistent with expectations. This would indicate that there is a "shortcut" to observing significant traits of children. Erikson's concepts can be quantified and used to chart a child's developmental trend. There was support for Erikson's theory that a child must resolve the earlier stages before subsequent stages can be well resolved.

From the second hypothesis it was demonstrated that Erikson's theory of developmental stages empirically differentiated among advantaged, deprived, and handicapped children with statistical significance. Statistical analysis indicated little significance between the scores of advantaged and deprived children. While being aware the instrument could be as equally responsible for any lack of significant differences between groups this would suggest that the pre-school program had had a positive influence on the development of the deprived child. There was a marked difference between the handicapped and the other two groups.

While the findings were not conclusive there were indications that Erikson's theory of developmental stages could be used diagnostically to determine a child's developmental level and presence of a problem. In many instances scores correlated with independent diagnostic descriptions of children. The quantitative developmental

level of a child did have diagnostic significance. Data demonstrated individual deficiencies in the advantaged group. While it was difficult to determine from the global score what was the specific problem, it is important, diagnostically, that a low score indicated something was wrong.

In this study at least, it was indicated that neither a trained clinical observer, a parent nor records could be reliably trusted as closely approximating a child's level of development. A consensus or central tendency, a trained observer, the records and last, the parent of a non-superior child would be closer to theoretical criteria in descending order.

Limitations of the Study

Before accepting these conclusions limitations of the study must be considered.

The absence of previous studies of Erikson's concepts and empirical study of psychoanalytic theory in general made this initial attempt exploratory in nature.

While a major factor in this study, the low observer reliability may not have been as limiting as appeared in the various statistical measures. Variation was seen to be attributable to controllable factors. Some of these are indicated in our assessment of those variables we considered less well controlled than they could have been.

Among individual group members there were different interpretations of Erikson. While ostensibly there was group consensus over the terminology, differences nevertheless occurred over interpreting a particular behavior. This was due in considerable part to an abstract nature of Erikson's concepts which made it difficult to reduce them to manageable operational definitions. At one point the older handicapped children were included with the young, advanced children. The group suspected that this may have been a significant factor in the lack of group correlation in testing Erikson's impression that "as children advance chronologically they advance developmentally."

There was insufficient training and preparation for the actual observations. Only one thirty minute observation period was arranged as a pre-test. At this time the first schedule, subsequently abandoned, was used. There was no subsequent field pre-test of the final instrument before observations actually began. There still existed disparities over the meaning of behavior and use of the instrument.

The children were observed only four separate times for 15 minutes. Ratings changed from the first to the final observations. Additional observations would result in a more stable mean.

Various problems arose related to the questionnaire used in the study. Some of the questions were ambiguous and could be

loosely interpreted. All questions were not of equal weight; due to the time factor and limited sample it was not feasible to do a thorough item analysis.

The instrument was based on judgments of behavior. It was felt by the group that it was not possible to observe all relevant behavior of active children. Furthermore, all behavior occurs in context, and the project was unable to include or estimate the entire context.

It would have been desirable to have before and after measures of development, a larger population, a larger number of observers for each child, a larger number of observations, a better set of records and a weighting of specific items.

Proposals for Further Research

The problem of low observer reliability indicated the need to explore the differences due to the observers and the observed. This was not possible within the time limits of this study. In addition to the matter of low observer reliability further research might direct itself to the questions: is the reliability achieved actually high enough on which to base treatment; at what level of confidence should social workers, with similar training, be expected to agree on clinical judgments?

Observations over a longer period of time are needed more

accurately to reflect change and developmental level. This also would allow the rather well-adjusted child, observed in a temporary regressive state, to resume his level of functioning.

While the case records, in general, contained insufficient information to make reliable judgments, data obtained from the few records with detailed studies of a child did indicate high inter-pair reliability. In the future an analysis could be made of the relationship between more voluminous files and higher correlations.

Intra-pair reliability on parent interviews indicated that the instrument could be meaningfully used by others not necessarily trained in Erikson when judgments are based on the verbal report of the parent rather than observer interpretation and quantification of behavior. Future study should concern itself with the question: what conditions are sufficient for the use of such an instrument by teachers, nursery school aides, and others who deal with children?

Further research is indicated to demonstrate whether, as the age range increases and the influence of the handicapped children is diluted, or even excluded from the test, high positive correlations result.

In view of the lack of significance between the advantaged and deprived children future study could explore the association between the deprived child's duration in the program and his developmental level.

Future research might explore reasons for the disparity in ratings of social workers and parents', i.e., parents' overrating in comparison to social workers. Was this due to the child's increased security in the home, social worker bias, ambiguous questions, parental exaggeration of the child's accomplishment in the pre-school program, parental hesitancy to rate the child as low as he ought to be rated---?

It was indicated that advantaged parents overrated their children much more than did the parents of the deprived or handicapped. Are the parents of the deprived more realistic or are the lower ratings due to inferiority feelings toward themselves, their children, or environment? Are parents of the handicapped group better able to acknowledge, rather than deny, problems of their children? Is superiority a function of the parental attitude?

More study is yet needed to assess the validity of using such an instrument as a diagnostic tool to determine a child's developmental level and/or problem area. On the 100 point scale, used in this study, it was not assumed that when a child had progressed beyond 50 he would have sufficiently resolved the developmental crisis inherent to that stage permitting him to move into the subsequent developmental stage. Further research is required to determine more precisely at what point on the scale a crisis is actually met and resolved.

A higher score for the first developmental stage, followed by lower scores for subsequent stages, was the usual pattern for the advantaged and deprived children. This pattern was reversed for some handicapped children who were found to have a low score for the first developmental stage and higher scores for later developmental stages. This reversal of scores for the handicapped children raises questions for future exploration. These include: do the inverse scores mean that handicapped children can resolve subsequent stages if previous stages are unresolved; does an inverse pattern suggest problems; does an inverse pattern represent over-compensation in a later stage?

Value of this Study to the Field of Social Work

This study has possible value especially for the field of social work.

Our findings suggest that Erikson's theory can be applied in a quantitative manner and used by social workers in observing behavior and as a diagnostic tool. The discrepancies which emerged among observers, however, make suspect the reliability of judgments of individual social workers making statements in Eriksonian terms.

If, as our study suggests, a diagnostic instrument can be devised, it would have value in the area of prevention as well as

treatment. Such an instrument would be of value to all those who are involved with children and in a position to take remedial action upon the detection of dysfunctional or maladaptive behavior.

In showing the feasibility of an empirical relationship with a theory previously considered unamenable to scientific treatment, this research has made a basic contribution to the body of social work knowledge. The study marked an effort among social workers to refine practice methods and subject them to empirical test. The study has further value because the field of social work, an applied science, is becoming more concerned about the application of the scientific method. To the extent that we have quantified what were essentially qualitative theories, a basic advancement of the scientific method has been applied, opening up a new dimension in the assessment and application of Eriksonian theory.

BIBLIOGRAPHY

- Appelberg, Esther. 1966. Book review on Insight and Responsibility. *Child Welfare* 45(2):108-109.
- Augé, Claude et Paul Augé (eds). 1941. *Nouveau petit Larousse illustre*. Paris, Librairie Larousse. 1765 p.
- Bergen, Mary E. 1964. Some Observations of maturational factors in young children and adolescents. In: *Psychoanalytic study of the child*, ed. by Ruth B. Eissler et. al., Vol. 19. New York, International Universities Press, p. 275-287.
- Dodd, Stuart C. 1943. Operational definitions operationally defined. *American Journal of Sociology* 48:482-489.
- Erikson, Erik H. 1956. The problem of ego identity. *Journal of American Psychoanalytic Association* 4(1):56-121.
- _____. 1959. Identity and the life cycle. *Psychological Issues Monograph* 1(1):1-171.
- _____. 1960. Youth and the life cycle. *Children* 7(2):43-50.
- _____. 1961. The roots of virtue. In: *The humanist frame*, ed. by Julian Huxley, New York, Harper & Brothers. p. 147-165.
- _____. 1962a. Reality and actuality. *Journal of American Psychoanalytic Association* 10(3):451-473.
- _____. 1962b. *Young Man Luther: A study of psychoanalysis and history*. New York, W. W. Norton. 288 p.
- _____. 1963a. *Childhood and society*. New York, W. W. Norton & Company Inc. 445 p.
- _____. (ed.). 1963b. *Youth: Change and challenge*. New York, Basic Books. 284 p.
- _____. 1964a. A memorandum on identity and Negro youth. *Journal of Social Issues* 20(4):29-42.

-
- 1964b. *Insight and responsibility*. New York, W. W. Norton & Company Inc. 256 p.
- Erikson, Erik H. 1965a. Concepts and identity in race relations: Notes and queries. *Daedalus* Winter: 145-171.
-
- 1965b. Psychoanalysis and ongoing history: Problems of hatred and nonviolence. *American Journal of Psychiatry* 122(3):241-253.
- Escalona, Sibylle K. 1963. Patterns of infantile experience and the developmental process. In: *Psychoanalytic study of the child*, ed. by Ruth B. Eissler et. al., Vol. 18. New York, International Universities Press. p. 197-245.
- Esman, Aaron H. 1965. Book review of *Insight and Responsibility*. *Psychoanalytic Quarterly* 34:117-119.
- Eysenck, H. J. 1959. *Uses and abuses of psychology*. Baltimore, Penguin Books, Inc. 318 p.
- Freud, Anna. 1958. Child observation and prediction of development. In: *Psychoanalytic study of the child*, ed. by Ruth B. Eissler et. al., Vol. 13. New York, International Universities Press. p. 146-164.
-
1963. The concept of developmental lines. In: *Psychoanalytic study of the child*, ed. by Ruth B. Eissler et. al., Vol. 18. New York, International Universities Press. p. 245-266.
-
1965. *Normality and pathology in childhood: Assessments of development*. New York, International Universities Press. 273 p.
- Friedenberg, Edgar Z. 1965. Book review of *Childhood and Society and Insight and Responsibility*. *New York Review of Books* 4(7):1-7.
- Gordon, Helen L., Mildred Kane, Carol Creedon, and Nona Glazer. 1966. *This was us: An evaluation of the Jewish Community Center and Fruit and Flower pre-school and day care project*. Office of Economic Opportunity Grant Project Report 7-12 1965-1966. Portland, Oregon, Jewish Community Center.

- Graham, Ian. 1964. Book review of *Childhood and Society*.
Bulletin of the Meninger Clinic 28(5):283-284.
- Greenwood, Ernest. 1961. Lectures in research methodology for
Social Welfare Students. University of California Syllabus
Series no. 388. Berkeley, 1961. 121 p.
- Gutmann, David. 1965. Book review of *Childhood and Society*.
American Journal of Sociology 70:498-499.
- Hartmann, Heinz. 1964. *Ego psychology and the problem of
adaptation*: Translated by David Rapaport. New York,
International Universities Press. 121 p.
- Henry, Jules. 1965. Book review of *Childhood and Society*.
American Journal of Orthopsychiatry 35:616-620.
- Hoffman, Martin L. and Lois W. Hoffman (eds). 1964. Review of
child development research. New York, Russell Sage
Foundation. 547 p.
- Lepper, J. Heron and Rudolf Kottenhahn (eds.). 1939. *Heath's
new German and English dictionary*. Boston, D. C. Heath.
687 p.
- Lewis, Norman (eds.) 1964. *The new Roget's thesaurus in
dictionary form*. New York, G. P. Putnam's Sons. 552 p.
- Lifschutz, Joseph E. 1964. A brief review of psychoanalytic ego
psychology. *Social Casework* 45(1):3-9.
- Lowenfeld, Henry. 1960. Book review of *Young Man Luther*.
Psychoanalytic Quarterly 29:108-111.
- Lundberg, George A. 1942a. Operational definitions in the
social sciences. *American Journal of Sociology* 47:727-743.
- _____. 1942b. *Social research: A study in methods
of gathering data*. New York, Longmans, Green and Co.
426 p.
- Lynd, Helen Merrell. 1961. *On shame and the search for
identity*. New York, Science Editions. 318 p.

- Mackler, Bernard. 1964. Book review of *Childhood and Society*. *Journal of Individual Psychology* 20(1):110.
- Mahler, Margaret S. 1963. Thoughts about development and individuation. In: *Psychoanalytic study of the child*, ed. by Ruth B. Eissler et. al., Vol. 18. New York, International Universities Press. p. 307-325.
- Maier, Henry W. 1965. Three theories of child development: The contributions of Erik H. Erikson, Jean Piaget, and Robert R. Sears, and their applications. New York, Harper and Row Publishers. 304 p.
- McCurdy, Harold. 1959. Book review of *Young Man Luther*. *Contemporary Psychology* 4(7):201-202.
- Meier, Elizabeth G. 1964. An inquiry into the concepts of ego identity and identity diffusion. *Social Casework* 45(2):63-70.
- Mohr, George J. 1960. Book review of *Identity and the Life Cycle*. *Psychoanalytic Quarterly* 29:105-108.
- Pearlman, Helen Harris. 1965. Book review of *Insight and Responsibility*. *Social Service Review* 39(1):110-111.
- Perry, Joseph B. 1965. Book review of *Childhood and Society*. *Journal of Marriage and the Family* 27:115-116.
- Pye, Lucian W. 1961. Personal identity and political ideology. *Behavioral Science* 6(3):205-222.
- Ritvo, Samuel and Albert J. Solnit. 1958. Influences of early mother-child interaction on identification processes. In: *Psychoanalytic study of the child*, ed. by Ruth B. Eissler et. al., Vol. 13. New York, International Universities Press. p. 64-86.
- Rubinfine, David L. Book review of *Insight and Responsibility*. *Social Casework* 46(9):562-563.
- Spitz, Rene A., in collaboration with W. Godfrey Cobliner. 1965. *The first year of life*. New York, International Universities Press. 394 p.

Weil, Anne Marie P. 1956. Some evidences of deviation development in infancy and childhood. In: Psychoanalytic study of the child, ed. by Ruth B. Eissler et. al., Vol. 11. New York, International Universities Press, p. 292-303.

Winnicott, D. W. 1966. The maturational processes and the facilitating environment. New York, International Universities Press. 295 p.

APPENDIX

RATING SCHEDULE

1. How sure of himself is he?
 2. How comfortable is he with new people or situations?
 3. How much does he enjoy looking at things and hearing sounds?
 4. How upset does he get when mother leaves him?
 5. How often does he spit saliva or spit up food?
 6. How much does he overeat (too much or too often)?
 7. How often does he put things into his mouth?
 8. How much does he cry, pout, whine or whimper?
 9. How trusting is he?
-

10. How much does he do things for himself?
11. How often does he choose things for himself?
12. How well does he control (a) bowel and (b) bladder?
13. How well do you think he talks at this age?
14. How much does he follow rules?
15. How much does he tell others what to do?
16. How much does he want things orderly or "just so"?
17. How much does he repeat the same thing again and again?
18. How often does he give up on things he tries?
19. How often does he cling to adults?
20. How often does he blush, hide his face, or turn away?

21. How much autonomy does he show?
 22. How much shame and doubt does he have?
-
-

23. How active is he?
 24. How curious is he about sex?
 25. How freely does he enter into new experiences?
 26. How much does he imitate adults or make up games?
 27. How often does he ask questions?
 28. How much is he able to share with others?
 29. How often does he fight or argue?
 30. How much initiative does he show?
 31. How much guilt does he show?
-
-

32. How hard-working is he in doing things?
 33. How much does he like to make things or complete work?
 34. How much does he like to work with others?
 35. How much does he like to compete?
 36. How industrious is he?
 37. How much feeling of inferiority does he show?
-
-