DETERMINATION AND CONSTRUCT VALIDITY

OF EGO IDENTITY STATUS

DISSERTATION

Presented in Partial Fulfillment of the Requirements
for the Degree Doctor of Philosophy in the
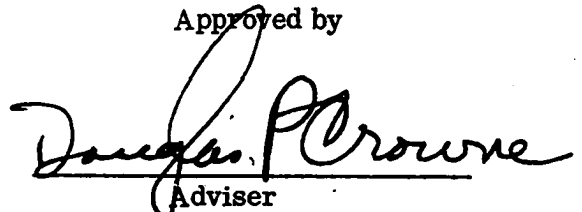Graduate School of the Ohio State University

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* * * * * *

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<div align="center">J.E.M.</div>

CONTENTS

iv

TABLES

CHAPTER I

BACKGROUND

<u>Ego Identity: An Introduction to the Construct</u>

> It is difficult to be tolerant if down
> deep you are not sure that you are a
> man or a woman, that you will ever grow
> together again and be attractive, that
> you will be able to master your drives,
> that you really know who you are, that
> you know who you want to be, that you
> know what you look like to others, and
> that you will know how to make the
> right decisions without once and for
> all committing yourself to the wrong
> friend, sexual partner, leader, or
> career (p. 43).

Thus, Erikson (1950) in discussing the origins of

group snobbishness in adolescents describes the <u>identity

crisis</u>[1] of young people in our society. The achievement

of <u>ego identity</u>, the successful resolution of this crisis,

involves regrouping oneself from myriad childhood beliefs

and identities, in the face of reawakened sexual drives,

body changes, and increased social demands, in order to

make those personal commitments essential to participation

in the adult world.

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[1]All underlined terms in this first section are
Erikson's.

As opposed to more primitive societies where, from
birth, children are progressively exposed to role-
molding conditions (Whiting & Child, 1953), the emphasis in
Western culture, particularly in the United States, has
been on the free choice of role (Erikson, 1963). A pro-
longed period of experimentation is provided in adolescence
during which the individual may engage in social play,
trying out various occupational choices, religious orien-
tations, and modes of sexual behavior. This moratorium
becomes institutionalized for many young people in the form
of college education. While this period of time is rela-
tively free from adult concerns of making a living and
caring for others, it does press the individual to make a
number of crucial decisions about who he is.

Ego identity seems to be one of those terms in psychol-
ogy that has been eagerly appropriated by clinical workers,
perhaps because of its face validity or its psychosocial
promise of some rapprochement with traditionally environ-
mentalist academicians. On one hand, this eagerness seems
premature; to date only four studies (Bronson, 1959; Gruen,
1960; Smith, 1960; and Block, 1961) have been published
in which this fourteen year old concept was used. One
reason for this paucity of research may be found in the

admittedly non-operational terms used by the concept's

originator:

> The integration now taking place in the
> form of the ego identity is more than
> the sum of childhood identifications.
> It is the inner capital accrued from
> all those experiences of each successive
> stage, when successful identification
> led to a successful alignment of the
> individual's basic drives with his en-
> dowment and his opportunities. In
> psychoanalysis we ascribe such success-
> ful alignments to "ego synthesis"; I
> have tried to demonstrate that the ego
> values accrued in childhood culminate
> in what I have called a sense of ego
> identity. The sense of ego identity,
> then, is the accrued confidence that
> one's ability to maintain inner sameness
> and continuity (one's ego in the psycho-
> logical sense) is matched by the sameness
> and continuity of one's meaning for others.
> (Erikson, 1950, p. 39)

> I can make the subject matter of identity
> more explicit only by approaching it from
> a variety of angles - biographic, patho-
> graphic, and theoretical; and by letting
> the term identity speak for itself in a
> number of connotations. At one time,
> then, it will appear to refer to a con-
> scious sense of individual identity; at
> another to an unconscious striving for a
> continuity of personal character; at a
> third, as a criterion for the silent
> doings of ego synthesis; and, finally, as
> a maintenance of an inner solidarity with
> a group's ideals and identity. In some
> respects the term will appear to be colloquial
> and naive; in another, vaguely related to
> existing concepts in psychoanalysis and
> sociology. If, after an attempt at clari-
> fying this relation, the term itself still
> retains some ambiguity, it will, so I hope,

> nevertheless have helped to delineate a
> significant problem, and a necessary
> point of view. (Erikson, 1956, p. 57)

On the other hand, there are kinds of validation other
than those depending on immediate prediction in an experi-
mental setting. Psychoanalysis, out of which the concept
of ego identity arose, suggests its own method of valida-
tion: internal consistency within a clinical setting.
However, this study aims to treat ego identity as a con-
struct (Cronbach & Meehl, 1955), develop measures of the
construct, and assess its predictive validity in an
experimental situation.

It should be made clear at the outset that we are not
seeking to measure a structural "thing" called ego identity.
What we are attempting to do is to indicate those behaviors
that should follow if the criteria for ego identity,
according to operationally defined referents, have been
met.

In the process of specifying these referents, we
have found it convenient to invent "Identity Statuses."
These are four styles of meeting the identity crisis, four
"brands" of ego identity. The Identity Statuses are:
Identity Achievement, Foreclosure, Moratorium, and Identity
Diffusion. Theoretical and empirical definition of these

terms, as well as the superordinating term ego identity,

constitute the main focus of this study.

Ego Identity: The Context of the Construct

Ego psychology

The construct ego identity was developed by a prac-

ticing psychoanalyst and has arisen out of the relatively

current elaboration of psychoanalytic theory known as "ego

psychology." Rather than reacting against orthodox Freudian

theory, as have the Neo-Freudians, the ego psychologists

have set themselves the task of exploring in more detail

functions ascribed to the ego. Hence, there is a greater

interest among these contemporary theorists in matters

that have been more typically the concern of the academi-

cians; e.g., learning, thinking, group relationships, etc.

Rapaport (1958) defines the field of ego psychology

thus:

> Before beginning our survey it will be
> worth reminding ourselves that the ego,
> the id, and the superego are concepts.
> They are abstractions which refer to
> certain characteristics of behavior. In
> contrast to the id, which refers to
> peremptory aspects of behavior, the
> ego refers to aspects of behavior which
> are delayable, bring about delay, or
> are themselves products of delay. The
> ego is a general concept: the explana-
> tion of those characteristics of behavior
> to which it refers requires many subsidiary
> concepts. Ego psychology encompasses all
> these concepts and its propositions state

> the relationships among them. Thus it
> is the theory of the relationships among
> behavioral referents of all these con-
> cepts. In addition, however, it includes
> propositions coordinating ego concepts
> with the other concepts in psychoanalysis.
> (p. 5)

Historical development of ego psychology (after Rapaport, 1958)

The first three phases of the development of the ego concept are found within the span of Freud's own theorizing. In the first phase, during the Freud-Breuer period, the ego was defined as the "self" or the "dominant mass of ideas" which served to defend the individual against the disruptive emergence of affect-laden memories by dissociating them from consciousness. Hence, the main function of the ego was to prevent the re-encountering of painful affect by preventing the recall of a reality experience.

The second phase began with Freud's discovery that patient's reports of infantile seduction (the painful reality experiences referred to above) were their own fantasies and had no basis in reality. In attempting to account for the source of these fantasies, he temporarily withdrew concern from reality relationships and concentrated on instinctual processes. The role of the ego was now to be established vis a vis the id, rather than external reality. Out of this new focus of concern three

important contributions were made to the concept of ego:
the secondary process, the reality principle, and the
analysis of the repression process.

The third phase of ego development saw an increasing
degree of autonomy granted the ego. Whereas, previously,
the ego had arisen solely in response to frustration of
id impulses and was dependent on the id for both its con-
tents and energies, this latter phase of Freud's theorizing
assigned to the ego both genetic roots and energies of its
own. It was toward the end of this phase that Freud re-
introduced consideration of the role of the ego in reality
relationships. The ego now stood as a structure with
limited independence, having the function of coping on the
one hand with instinctual demands, on the other, with
external reality. This third phase culminated in Anna
Freud's book on the role of ego and defense mechanisms
(1946). Although Freud had progressively set the ego free
from its id origins, he left to later theorists the task
of elaborating the bases of true ego autonomy in terms of
independent energy and ego epigenesis.

Present status of ego psychology

The fourth phase in the development of the concept of
ego is the present one. Three main problems faced early

ego psychologists: the independent origins of the ego; a theory of object relations; and psychosocial considerations. The environmental aspects of human development were apparently so compelling that the Neo-Freudians (Adler, Horney, Kardiner, Fromm, and Sullivan) became preoccupied with them to the exclusion of the biological considerations (in particular, libido theory) of orthodox psychoanalytic theory (Munroe, 1955).

Hartmann, Kris, and Loewenstein (1946) established ego roots independent of instinctual drives. According to these theorists (Hartmann, in particular), both ego and id were differentiated out of a common matrix. This implied that the ego, in its origin, had both unique processes as well as its own energy. The infant entered the world "pre-adapted" to an "average expectable environment" (Hartmann, 1939, 1952). Those ego apparatuses whose origin was innate were referred to as mechanisms of "primary autonomy"; those which developed later as a result of defense processes and the subsequent binding of instinctual energies were referred to as apparatuses of "secondary autonomy." Thus, the ego was autonomous in two senses: it had its own pattern for development ("the epigenetic principle") as well as those mechanisms which, while conflict-initiated, eventually became free from their instinctual origins.

The most important recent additions to ego psychol-
ogy have been made by Erikson whose concepts of ego epigen-
esis and psychosocial development will be discussed later
in this section. One result of these later additions to
theory has been an increase in the possibilities for exper-
imental investigation of psychoanalytic propositions;
although even these attempts still remain many degrees
removed from fundamental metaphysical assumptions of psycho-
analytic theory in general. A summary of recent theoretical
advances as well as of Erikson's position relative to them
is provided by Rapaport's discussion of psychoanalytic theory
as psychological theory in Koch (1959):

> Freud asserted as late as 1917 that the
> postponement of the exploration of sec-
> ondary processes, ego functions,
> reality relations, and adaptation was
> a deliberate policy and not a failure
> to recognize their importance. Actual-
> ly, Freud did take steps toward
> including them in the theory in 1900
> and in 1911, and consolidated these
> steps between 1917 and 1926. But
> only in 1939 did Hartmann give the
> first systematic formulation of real-
> ity relationships and adaptation by
> expanding the frame of reference of
> ego psychology. This systematization,
> which was accompanied by the claim that
> psychoanalysis is a comprehensive
> system of psychology, was contained in
> the studies of Hartmann, Kris, Loewenstein,
> Rapaport, Jacobson, and Gill and Rapaport.

> In the meanwhile, and even before these
> developments in the mainstream of
> psychoanalysis, adaptation and reality
> relationships, especially the role of
> interpersonal relations and society,
> were central to the pries of Adler,
> Horney, Sullivan, and Kardiner. Erikson
> was the first to unite this tributary of
> theoretical development, which enlarged
> the actual realm of empirical reference,
> with the mainstream of the theory. (pp.
> 78-79)

Ego Identity: A Description of the Construct

Psychosocial stages

The achievement of ego identity is a solution to one
of the eight psychosocial crises facing man from birth to
death. According to Erikson (1963) each of these crises
arises within a particular age period; hence, the crises
are referred to as phase - specific. During each period
of the life cycle, the developing individual has certain
abilities and needs; society, at each period, makes certain
demands and provides certain rewards. Hence, the basis of
this psychosocial approach lies in a cogwheeling or
mutuality of the developing individual and his social
milieu.

The pattern of development on the individual's side
is marked by increasingly differentiated ego functions.
As each function matures, society provides both institutions

and caretakers who enable the individual to adapt that

newly-developed function to social needs. One should not

lose sight here of the notion of mutuality when speaking of

adapting. For Erikson does not see the process as one in

which the individual is squeezed into a societal mold, but

rather a meshing of the individual's needs and capabilities

at a particular age with society's rewards and demands at

that age. Rapaport (1959) puts this nicely:

> In Erikson's conception neither does
> the individual adapt to society nor does
> society mold him into its pattern; rather,
> society and individual form a unity within
> which a mutual regulation takes place. The
> social institutions are preconditions of
> individual development, and the developing
> individual's behavior and in turn elicits
> that help which society gives through its
> adult members directed by its institutions
> and traditions. Society is not merely a
> prohibitor or provider; it is the necessary ma-
> trix of the development of all behavior.
> Indeed, the development and maintenance of
> the ego, of the superego, and perhaps of all
> structures are dependent on the social matrix:
> behavior is determined by it and is possible
> only within it. (p. 104)

Erikson relates shifting zones of libido concentration,

growing ego capabilities, and social institutions. The

early psychosocial stages parallel psychosexual stages

and then extend beyond them to encompass the whole life

cycle. Also, each stage is characterized by a particular

task or crisis. These phase-specific crises, their approx-
imate time of occurence, as well as corresponding psycho-
sexual stages, are presented below:

Age	Psychosexual Stages	Psychosocial Crises
Infancy	Oral	Basic trust vs. mistrust
Early Childhood	Anal	Autonomy vs. shame, doubt
Play Age	Phallic	Initiative vs. guilt
School Age	Latency	Industry vs. inferiority
Adolescence	Genital	Identity vs. role confusion[2]
Young Adult		Intimacy vs. isolation
Adulthood		Generativity vs. stagnation
Maturity		Ego integrity vs. despair

This chart gives the impression that a particular
crisis occurs only during its phase and that crises are
solved once and for all. Neither of these is accurate. A
particular crisis is more likely to arise at a particular
phase and dominate behavior during that phase, but it may

[2]In all of his writings prior to his most recent,
Erikson has referred to the negative outcome of the iden-
tity crisis as "identity diffusion." However, in his latest
book, he calls this "role confusion." Since the former
term has been used throughout this study, and since the
author thinks it more accurate to speak of an adolescent's
commitments as "spread out" rather than "mixed up" we shall
retain "identity diffusion."

recur at subsequent phases. This is especially true of ego

identity vs. identity diffusion. One does not achieve a

permanent ego identity; an identity crisis may recur in

later life. However, the extent and manner in which a

crisis is solved makes definite contributions to the sol-

ution of subsequent crises. So, for example, failure to

develop a sense of "basic trust" is hypothesized as leading

to a "mistrust of time" during the adolescent period.

The epigenetic principle

A fundamental premise of the system is the epigenetic

principle which asserts that basic patterns of development

are present in infancy, and at given stages throughout life

certain zones of the body and certain modes of interaction

with the environment become prepotent. Research on

"critical periods" in child development lends some support

to this idea (Mussen, Kagan, & Conger, 1963). The majority

of studies on walking and talking indicate that development

of these skills awaits apparently genetically controlled

maturation of structure; on the other hand, unless suffi-

cient environmental stimulation is provided (mutuality,

again) these skills will not appear.

While the epigenetic principle provides a basis for

autonomous development of ego functions, it does not state

that behavior will fall into the same pattern across cultures. Any particular culture will mold and utilize a particular ego skill in its own way and toward its own ends. Different societies offer different solutions to phase-specific crises. In other words, even though "identity vs. identity diffusion" may be a cross-cultural problem, there is no necessary cross-cultural solution (Erikson, 1963).

Ego identity vs. identity diffusion

The psychosocial task facing the adolescent is essentially one of integration. To quote Erikson:

> From a genetic point of view,
> then, the process of identity formation
> emerges as an evolving configuration -
> a configuration which is gradually es-
> tablished by successive ego syntheses
> and resyntheses throughout childhood;
> it is a configuration gradually inte-
> grating constitutional givens, idio-
> syncratic libidinal needs, favored
> capacities, significant identifications,
> effective defenses, successful sublima-
> tions, and consistent roles. (1956, p. 71)

Faced with the imminence of adult tasks (e.g., getting a job, becoming a citizen, planning marriage) in which he must now become one of the "giver" rather than the "given," the late adolescent is seen by Erikson as having three alternatives. He may form a positive identity, based on a sense of his continuity with the past as it relates to his contributions to the future; he may develop a negative identity

(Erikson, 1956, pp. 83-84), based on a repudiation of his
past with an essentially negative approach to the future;
or he may develop no identity--<u>identity</u> <u>diffusion</u>--in which
both past and future seem relatively meaningless.

The achievement of ego identity involves a synthesis of
childhood identifications in the individual's own terms, so
that he establishes a reciprocal relationship with his
society and maintains a feeling of continuity within himself.
It represents a reformulation of all that the individual
has been into the core of what he is to be.

In order to do this, he must, of course, relinquish
his claims to infantile sources of gratification as well
as renounce fantasies of infantile omnipotence (Fenichel,
1945). Doing this requires choosing among alternatives
with a subsequent commitment to the alternative chosen.

Two crucial areas in which the adolescent must make
commitments are occupation and ideology. With respect to
the importance of occupational commitment, Erikson, in
speaking of identity diffusion says: "In general, it is
primarily the inability to settle on an occupational iden-
tity which disturbs young people" (1963, p. 252). In
reference to ideology, Erikson states:

> To envisage a future, the young adult
> may also need that something which Shaw
> called "a religion" and "a clear comprehension

of life in the light of an intelligible
theory." I indicated at the beginning
that we would call this something-between-
a-theory-and-a-religion an ideology ....
..... Whatever else ideology is and what-
ever transitory or lasting social forms it
takes, we will tentatively view it here
and discuss it later - as a necessity for
the growing ego which is involved in the
succession of generations, and in adol-
escence is committed to some new synthesis
of past and future: a synthesis which must
include but transcend the past, even as
identity does. (p. 97)

Differentiation of Ego Identity from Other Concepts

Identity and identification

"Children at different ages identify with those part

aspects of people by which they themselves are most

immediately affected, whether in reality or fantasy"

(Erikson, 1956, p. 67). The question then arises as to

whether identity is merely a sum of past identifications,

a set of new identifications, or something more than either

of these. The answer here is to be found in terms of the

limitations of the mechanism of identification for the task

of identity formation. Again to quote Erikson (1956, pp.

67-68): "The final identity, then, as fixed at the end of

adolescence is superordinated to any single identification

with individuals of the past: it includes all significant

identifications, but it also alters them in order to make a

unique and a reasonably coherent whole of them."

ideals or complete placation of the superego, but, in

addition, the establishment of identity requires the ego to

synthesize superego demands, ego ideals, the individual's

capabilities, and society's expectations, so that identity

formation is the result of an integration of these factors.

Translation into Research

Previous studies: measures

Having presented some of the theoretical rationale for

the concept ego identity, one now asks the questions: "Is

it measurable?" "Is it useful?" The answer to the second

must, of course, await the solution to the first.

The three published experiments using this construct

have contributed three different ways of measuring it.[3]

Bronson (1959) used both a structured interview, whose main

focus was on topics of "continuity with the past" and "free-

dom from anxiety," and a semantic differential technique,

which yielded "certainty of self-conception" and "temporal

stability of self-rating." Gruen (1960) used a Q-sort

real-ideal self discrepancy as his main measure of ego

identity with a subsidiary 14-item questionnaire. Block

(1961), while not purporting to measure ego identity per

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[3]A fourth study (Howard, 1961) is not of sufficient
detail or significance to necessitate inclusion.

Superego, ego ideal, and ego identity

All three of these concepts are related in some way to an individual's self-esteem. The ego ideal, which Freud conceived of as that facet of the superego closest to social reality, is similar enough to ego identity to necessitate differentiation. The relationship between ego identity and the superego is not so close.

The superego differs from ego identity in that it is archaic, punitive, and unchangeable; whereas, ego identity is contemporary, both rewarding and punishing (seldom as harshly punitive), and subject to constant revision. A superego is to a great extent forced onto a child; an ego identity is achieved.

Salient to the concept of ego ideal is a quality of unattainability. The ego ideal is composed of internalized aspirations, particularly the aspirations a given society has for the individual. "The ego ideal opens up an important avenue for the understanding of group psychology. In addition to its individual side, this ideal has a social side; it is also the common ideal of a family, a class or a nation" (Freud, 1914, p. 101). Ego identity differs from ego ideal in that it is even closer to social reality. Also, the achievement of ego identity is not only a real possibility, as compared with the improbable attainment of ego

se, reasoned from the theory underlying the construct that
the extent of "role variability" was a major referent for
identity vs. identity diffusion.

From the point of view of the author, a criticism may
be made of the measures used in these studies. One of the
most significant and possible fruitful aspects of Erikson's
theory is its emphasis on the mutuality of individual needs
and social expectations. This is embodied in the term
psychosocial. Yet none of these measures evaluated the
individual vis a vis his society. None of them classified
subjects with respect to the two phase-specific tasks which
Erikson indicates are central to the formation of an ego
identity; namely, selection of an occupation and formation
of an ideology. What these studies seem to have done is to
have investigated some feelings and behaviors associated
with achievement of identity without explicitly setting up
criteria for presence or absence of ego identity.

Two themes predominate the thinking of these authors'
about ego identity as reflected in their measures of it.
The first is a variability--stability dimension of self-
concept. Bronson (1959) refers to this as "temporal sta-
bility of self-rating"; in Gruen's study (1960) it occurs
as a dependent variable: the subject's degree of acceptance
of a false personality sketch of himself; for Block (1961)

this takes the form of "role variability." It seems that

ego identity is associated with a certain self-stability and

identity diffusion with a difficulty in self-definition.

The second dominant theme is one of overall adjustment.

This is reflected in the Bronson study as "freedom from

anxiety" and in the Block study as "susceptibility to

anxiety" as measured by the California Psychological Inven-

tory. Both of these themes are incorporated into the present

study - the first explicitly, the second implicitly.

Previous studies: results

Bronson's study attempted to specify some referents

for the construct ego identity by intercorrelating two

structured interview variables ("continuity with the past"

and "freedom from anxiety") with two semantic differential

measures ("certainty of self-conception" and "temporal

stability of self-rating"). He found significant inter-

correlations among all of these. While the age of his $\underline{S}$s

was appropriate (19-22), perhaps the number and composition

of the group was not. Correlations from the interview

measure were based on an N of 18, of whom at least 14 were

female. Now it is probably no coincidence that all of

Erikson's extensive examples of ego identity are men. His

book, <u>Young Man Luther</u> (1958), his biographical sketches of

George Bernard Shaw (1956), Adolf Hitler and Maxim Gorky

(1963), as well as his description of the typical American

identity (1963) - all involve ego identity in males. Cer-

tainly this is consistent with a psychosocial approach in

which the society sets different tasks, delineates different

roles, for men than it does for women. The achievement of

ego identity likely has different criteria for women, and

if this is the case, any study attempting to measure it

should certainly be accompanied by some theoretical rationale

for the particular variables used.

Although the Gruen study did yield the interesting

finding that Ss with a high self-ideal self discrepancy

tended to accept fake personality descriptions more than

those with a low discrepancy, there is some question as to

whether self-ideal self discrepancy is sufficient as the

sole indicator of ego identity. Some support for this

skepticism is found in the low correlation Gruen found

between a questionnaire measure of ego identity and the

dependent variable of acceptance of fake personality descrip-

tions. Previously, he had found a high correlation between

the questionnaire and the discrepancy score based on the Q

sort. That is, Ss who tend to see a great discrepancy

between the way they are and the way they would like to be

also score low on a questionnaire measure of ego identity.

If both measures, the questionnaire and the Q-sort, are
referents for ego identity and acceptance of fake person-
ality descriptions is to be the validating criterion, then
either they both should predict or not predict to it. The
fact that they do not suggests that the measures may not
reflect the same construct.

The same criticism of a too-limited definition of ego
identity may be directed at the Block study whose sole
criterion was "role variability" as determined by the $\underline{S}$'s
ranking a set of twenty adjectives eight times to charac-
terize his behavior with eight "relevant others." These
were then factor analyzed and two groups of role rigid and
role diffuse $\underline{S}$s were set up. The author had predicted a
curvilinear (U-shaped) relationship between role variability
and susceptibility to anxiety. That is, both rigid and
role diffuse $\underline{S}$s should express more anxious tendencies. He
found instead a linear relationship. Role rigid $\underline{S}$s seemed
to experience least anxiety, role diffuse, the most. One
factor that may account for this somewhat surprising result
is the possibility that the same personality variables which
lead to role rigidity may also lead to giving "socially
desirable" (Crowne and Marlowe, 1960) answers on a rather
non-subtle measure, The California Psychological Inventory.

In short, the measure intended to reflect consequences of role rigidity may just have been too insensitive. In addition, Block suggests that the role rigid hypothesis failed to hold up because of too homogeneous a population. That is, by the time one gets to college, enough role variability has been developed to exclude him from the category of "really" role rigid. The present study, although employing different terminology, suggests that there are role rigid individuals (the Foreclosure Status) in college and that they do exhibit different characteristics from the role diffuse (the Identity Diffusion Status).

Summary

A central criticism of previous studies deals with the extent of their disregard of some of the theoretical bases and the degree of complexity of ego identity. This over-simplified approach is reflected to a great extent in the means of assessing ego identity, to a lesser extent in the dependent variables used.

Current Conception of Ego Identity

Basis for Identity Statuses

There are two notions which seem to characterize Erikson's writing about the phase of late adolescence. The first is the presence of some period of re-thinking,

sorting through, trying out various roles and life plans.
This is taken to be the behavioral referent for the internal
process referred to in psychoanalytic theory as "the syn-
thesizing function of the ego" (Erikson, 1956, p. 104).
We are calling this decision period crisis, a time during
adolescence when the individual seems to be actively involved
in choosing among meaningful alternatives.

The second indication of the achievement of ego identity
is subsequent commitment, particularly in such important life
areas as occupation and ideology. Commitment refers to the
degree of personal investment the individual expresses in a
course of action or belief.

In considering areas of the individual's life within
which to evaluate his Identity Status, we have chosen
occupation and ideology, the latter separated into religion
and politics. These areas recur in Erikson's theoretical
writings and are particularly salient in his biographical
sketches (Erikson, 1956, 1958, 1963). These areas seem to
be among the most crucial to the late adolescent, for it is
the first time that he is required by his society to make a
significant positive contribution to both his and its sur-
vival--to get a job. Also, as he stands on the threshold
of responsibility for the life cycles of others, he is faced
with the problem of constructing or re-constructing a

philosophy of life - a <u>Weltanschauung</u> - to accompany his
transition from the role of taker to giver.

The Identity Statuses

All published studies thus far have dealt with the
polar outcomes of the identity crisis: identity or identity
diffusion. But some "identities" are purchased cheaply,
while others come dearly. For example, it is difficult to
speak of one <u>achieving</u> an identity if he becomes a Methodist
Republican farmer like his Methodist Republican farmer father,
with little or no thought in the matter. Nor does he meet
one of our two criteria for identity achievement: experi-
encing some sort of crisis period. This line of reasoning
began the proliferation of Identity Statuses. Among those
individuals who share in common a <u>commitment</u>, one group
having experienced also a crisis period is labelled <u>Identity</u>
<u>Achievement</u>: the other group, with no apparent crisis, is
called <u>Foreclosure</u>.

In examining those individuals called identity diffuse
who seem to have in common a <u>lack</u> of commitment, the one
outstanding factor is that some seem to have given up (or
are at least presently unconcerned), while others are
struggling. Those who seem relatively unconcerned over their
lack of specific investments in their future are probably

properly called <u>Identity</u> <u>Diffusion</u> individuals. However,
it was felt that another term should apply to the strugglers;
<u>Moratorium</u> was chosen.

In this study, then, the individual is to be placed
into one of the four Identity Statuses for each of three
areas: occupation, religion, and politics. The following
is a description of the way in which the two criteria of
crisis and commitment are combined to yield an Identity
Status. Also included is a short sketch of how each Status
might appear as well as some verbatim statements from <u>S</u>s
in each Status.

<u>Identity</u> <u>Achievement</u>. Criteria: The individual has
passed through a decision period or crisis and appears
committed to his occupation and/or ideology (plus crisis,
plus commitment).

Sketch:

<u>Occupation</u>. He has seriously considered several
occupational choices or deviated from what his parents had
planned for him. He is reluctant to switch fields now and
seems to think of himself as <u>a</u> teacher, engineer, etc.
(Being <u>a</u> something means the difference between "taking
courses in education" and seeing oneself as "a teacher.")
Although his ultimate choice may be only a variation of the

parental wishes, he seems to have experienced a crisis

period and made a resolution on his own terms.

> The S had been in college for a
> quarter and then went into the Navy. He
> was originally interested in engineering,
> but is currently in a pre-med program.
> He made this choice during the service.
> "There was no sudden enlightenment,
> really, I just got interested. I wanted
> to be involved with people more than an
> engineer would. I mean help people.
> ....I'd be interested in going into gen-
> eral practice. Anything, now, but being
> a doctor I don't think I'd like. I'd
> been pushed into engineering by people
> in high school and my parents. That
> probably had something to do with taking
> off to the Navy. (How willing to give
> this up for something better?) I don't
> think very willing. I don't know what
> better could come along, personally."

Religion. He appears to have gone through a period

of doubt - either of past belief or disbelief - with a

resulting re-evaluation of faith and a commitment to some

action: church-going, religious discussions, etc. Whether

he ends up as religious or ñot religious in the conventional

sense is not important, only that he seems to have rethought

childhood concepts and achieved a resolution that leaves

him free to act.

> I'm Presbyterian and so are my
> parents. I was president of the youth
> group. (Come to doubt any religious
> beliefs?) Yes. Well, my mother is
> sort of a religious fanatic; I don't
> mean she gets up on a soapbox, but in the
> house she kind of pushes it on us. And

both my brother and I just rebelled
against it. I think my beliefs are
different from hers now and from dad's,
too.

Politics. The presence of a crisis period is probably

more difficult to ascertain here than in the other two

areas. He shows some difference from his parents' political

opinions; for example, he may see himself as more liberal

than they are. Evidence of commitment is usually seen in

the affective nature of his pronouncements, his tendency

to dispute political questions with others, and any polit-

ical action-taking whatsoever.

I'm going to register as a Democrat.
(How about your parents?) Well, they're
Republicans. I think that I agree with
much more of the Democrats' platform.
Now whether this is because of the Demo-
crats appeal more to the younger person,
I don't know. I just don't think that
the Republican party has as much to
offer as the Democrats. (Any particular
issues that you're interested in?) Civil
rights, for one thing. I think the
country needs the civil rights bill. I do
get into a lot of discussions about polit-
ical issues.

Foreclosure. Criteria: The individual does not seem

to have passed through any real decision period but, never-

theless, appears committed to occupation and/or ideology.

In this case, his choices coincide with those of parents or

parent surrogates whom he does not seriously question. (minus

crisis, plus commitment).

Sketch:

Occupation. It is difficult to distinguish where his

parents' goals for him leave off and where his begin. He

seems to have experienced either no choice period or only

brief and inconsequential ones. He is becoming what others

have influenced him or intended him to become as a child.

In addition, all of this seems ego-syntonic.

> The S is majoring in general science
> and plans to go into dentistry. "I never
> considered doing much else, really. My
> grandfather is an eye specialist - but
> that takes a long time. I thought of
> that for awhile. I think it would mostly
> be dentistry because my father has a
> practice built and every thing. (Did
> your parents have any plans for you?)
> They've always wanted me to become a
> dentist or an MD or both. It's just
> sort of been with me all the time, I
> guess."

Religion. His faith, or lack of it, is virtually

"the faith of his fathers (or mothers, as the case may be)

living still." College experiences serve only as confir-

mation of childhood beliefs. Dissonance seems absent and

he participates in religiously oriented activities if this

is consistent with parental background.

> (Do you have any particular religious
> beliefs?) I'm a member of the Baptist
> church. Everyone in the whole family has
> been a Protestant. We generally go where we
> like the minister, if we like the sermons
> and all, that's what matters most. The

> whole family goes to the same church.
> (Have you ever had any doubts about your
> religious beliefs?) No, I don't believe
> so. We discuss religion sometimes; I
> find myself pretty much in agreement with
> them."

Politics. Again, he is what his parents are with

little or no personal stamp of his own.

> (Do you have any particular politi-
> cal preferences?) Well, we're, rather,
> the whole family has been rather conser-
> vative. I'm inclined to be conservative
> myself. I'd probably vote for Goldwater,
> so would my parents. I'm positive."

Because of his commitment and apparent self-assuredness

the Foreclosure may appear similar to Identity Achievement.

However, one feels that if he were placed in a situation

where parental values were non-adaptive, he would soon be

greatly at a loss. This contrasts with the Identity

Achievement, who does not appear as if he would be over-

whelmed by sudden shifts in environment or by unexpected

burdens of responsibility.

Moratorium. Criteria: The individual is presently in

a crisis period, trying to make up his mind. Commitments

are likely to be vague and general. An important quality

here is a sense of active struggle among alternatives.

(in crisis, some commitment)

Sketch:

Occupation. He is dealing with issues often described as "adolescent." He is concerned less with preparing for a specific career than with choosing that career. His parents' plans are still important to him and he seems to be caught in the conflict of achieving some compromise among them, society's demands, and his own capabilities. It is not that he feels completely overwhelmed, but that he is unusually internally preoccupied with what, at times, seem to be unresolvable questions.

> I'm majoring in political science and
> history. Right now, it looks like I'll be
> teaching. But I'm still considering other
> things like law school or maybe some bus-
> iness like insurance - but it's probably
> teaching. I just decided on history this
> year. Did well on a couple of upper level
> courses and the professors encouraged me.
> ....Teaching seems the most attractive. I
> like the atmosphere and I'd have a chance
> to work with things I'd be interested in.
> But it just depends. I've only been thinking
> about business recently. A couple of friends
> of mine have had terrific offers and I'm
> almost in the same line. It's pretty attrac-
> tive. I don't know. Law school will
> depend on grades. ....There's a question
> with law school as to whether I can get
> through and whether I can handle a lawyer's
> duties. (How willing would you be to give
> up teaching if something better came along?)
> I could, I guess, but I don't know anyone
> who's gotten into it that didn't like it.
> If I went into teaching, I'd probably stay in
> it a good while. ....The problem now is what
> to go into, but right now it looks like
> teaching.

Religion. He seems to be dealing with fundamental
religious questions, not just a mere "shopping around"
among denominations.

> Gee, I'm such a poor Christian. I
> feel like a kind of hypocrite. I'm a Meth-
> odist; I don't like the procedure in the
> church here at college. I've gotten away
> from church, but I don't know if I'm sorry
> about it. I still have some basic
> Christian beliefs. I've begun to question
> a few things now. They're still pretty
> much questions. I don't want to decide
> them for awhile. (What sorts of questions?)
> Well, even the "virgin birth" and things
> like that. ....My beliefs are a little
> different from the folks. They accept
> pretty much the church doctrine completely.

Politics. He is likely to be doubtful about political
and religious commitment, but he seems dissatisfied with
the doubt and is trying to effect a resolution.

> I've looked into it some. Well,
> I'd ---- my parents were Republicans and
> so I was Republican for a long time. I'm
> kind of in favor of the Democrats just to
> give them a chance right now. I can't see
> too much difference between the two parties.
> I'd say I'm a liberal in terms of wanting
> to modify or change things. I almost
> believe in a welfare state, I guess. I don't
> know though.

In some cases there may be a denial of an internal
struggle which, according to the data presented by the S,
must be there. For example, in the case of one S's conflict
between a scientific attitude and religious belief, one
suspects the finality of his stated solution: "I just keep

them separate." Also, some Ss may show two or three differ-
ent Identity Statuses for one of the three main areas.
That is, an occupational choice may have elements of Iden-
tity Achievement, Moratorium, and Foreclosure. Although
these cases are rare, when one Status does not predominate,
a scoring of Moratorium is given.

At his worst, a Moratorium is paralyzed, unable to
act decisively in one way or another - not because of a
lack of commitment, but because of equal and opposite
commitment. His behavior closely resembles that of Identity
Diffusion. At his best, he seems reasonably well put
together, verbally expressive about his conflicts, somewhat
utopian in his ideological outlook, and often quite intel-
ligent. He approaches quite near Identity Achievement.

Identity Diffusion. Criteria: The individual has
either experienced no crisis or has passed through a crisis;
in either case, there is little, if any commitment (plus
crisis, minus commitment; minus crisis, minus commitment).
Sketch:

Occupation. No one occupational choice is really
decided upon, nor is there much genuine concern about it
(as contrasted with Moratorium). There is sometimes little
conception of what a person in the stated preferred occupation

does in a day-to-day routine. He only knows that it would
be "nice" to be a doctor or a teacher. The occupation
would be readily disposed of should opportunities arise
elsewhere.

> Well, right now it looks like I might
> major in history, but if I pull my psych
> grade up, I'll major in psych. Not too much
> you could do with a history major. Teach
> or go into law, I guess. I guess I'd prob-
> ably teach. With a psych major, I don't
> know what I'd do. I guess I'll have to
> talk with some psych majors. (What inter-
> ested you in history?) I did pretty well
> in it. Got good grades in it. ....Don't
> have any plans for when I get out of school.
> ....Folks wanted me to be a lawyer. I
> imagine it's fine. It's good money. But
> I don't know enough about it. (What
> interests you about being a teacher?)
> Well, you get two months off in the summer,
> and I imagine if I taught in college it
> would be very good money. And I kind of
> like history. I mean, I take to it very
> readily. (How willing would you be to give
> this up if something better came along?)
> I'd probably give it up quite rapidly. Any
> definite choice is pretty much up in the
> air right now. I wrote home the other day
> and said psych might be a good major. But
> you have to take an awful lot of courses
> for that, almost fourteen, I guess.

Religion. He is either uninterested in religious
matters or takes a smorgasbord approach, in which one
religious faith is as good as any other, and he is not
averse to sampling from all. The S will sometimes state
that his denomination is the same as his parents, yet show
little commitment to it.

I'm Presbyterian and, I discovered
this in history - latitudinarian. I don't
care what anyone else does. No, I favor
any religion. I have no biases. About
five or six years ago I was in this youth
group, but it wasn't much. I don't talk
about it much; it was a long time ago. I
don't make it to church around here. (Ever
have any doubts about your religious beliefs?)
Well, I suppose I never did really believe
thoroughly. Let's face it, the young are
liberal and I never - there's many things I
don't believe. I can't think of any right
off hand, but if you were to name some
things ---- (Well, take God, for example.)
Well, I took this course in Indian religion
last year and it kind of hardened me up
towards God. I think he's more indifferent
than anything else. I don't think he's a
loving god. I think he's more indifferent
and he knows there's probably better things
to come later, so don't worry about life.
He's not gonna push it. So in terms of
doubting things, I guess I wasn't that sold
to begin with. If I ever get into a dis-
cussion, I throw this Indian religion business
in. That pretty well covers what I believe.
I mean, I'm not as way out as the Hindus or
anything; I guess I still believe a little
bit in the tradition. (Who did you have the
course from?) I don't remember.

Politics. Both political and social interest are low.

He has little idea or concern where he stands with respect

to society - as if the world went its way and he went his

with little intercourse between the two. In short, cog-

wheeling is absent.

(	(Do you have any political preferences?)
No. My parents are split-ballot. They change
their minds. I don't find myself going much
one way or the other. I was for Nixon in '60,

but I guess I'd like Johnson in again.
(Have you ever taken any political action -
carried signs, written letters, joined
groups, etc.?) No. I'm just generally
indifferent.

There appear to be two types of Identity Diffusion.
One is a pre-crisis lack of commitment. The individual
would be a Foreclosure if he strongly advocated parental
values. There is some possibility here that the parental
attitude was one of: "It's up to you; we don't care what
you do." Under this guise of democratic child-rearing,
the parents may actually have provided no consistent struc-
ture which could be a guide for the growing individual, and
later on, an image against which to compare himself. Be-
cause he never really was anything, it is difficult for him
to conceive of himself as being anything. Child-rearing
considerations aside, the problems that are so immediate
and self-consuming for the Moratorium never really occur to
this "pre-crisis Identity Diffuse" person.

The second type of Identity Diffusion is the "post-
crisis Identity Diffuse" who seems committed to a lack of
commitment. This individual actively seeks to avoid
entangling alliances. His motto is: "Play the field."
No area of potential gratification is really relinquished;
all things are possible for him and they must be kept that

way. The main element that both pre- and post-crisis
Diffuse individuals have in common is a lack of commitment.

At his worst, an Identity Diffusion exhibits the dis-
organized thought processes, disturbed object relations, and
loosened ego boundaries associated with schizophrenia. At
his best, he is a rather blithe, carefree individual who
can "take or leave" both people and ideas.

Some support for the rationale back of these Statuses
is found in the observations of previous researchers.
Bronson (1959) does not see temporary role diffusion as a
necessary pathological state. He also says that "premature
identity closure could lead to a rigid denial of potentially
creative personality components." His "temporary diffusion"
and "premature identity closure" may correspond to Mora-
torium and Foreclosure. Block's (1961) "low role variabil-
ity" Ss, whom he interestingly finds least susceptible to
anxiety, may correspond to either Identity Achievement, or,
more likely, Foreclosure.

Summary

Having isolated our two main criteria: crisis and
commitment; delineated the life areas to which they are to
be applied: occupation, religion, and politics; and con-
structed Identity Statuses (Identity Achievement, Foreclosure,

Moratorium, and Identity Diffusion) summarizing the indi-
vidual's particular style of handling the identity crisis,
our next task was to develop operational measures.

Development of Measures

The central problem in measuring Identity Status is
to do justice to the complexity of the variables yet permit
objective scoring. We were interested, too, in assessing -
not only Identity Status but also overall ego identity.
The two measures finally decided upon that would allow Ss
both freedom of response and yet be objectively scorable
were an incomplete sentences blank and a semi-structured
interview. The incomplete sentences blank was used as a
measure of ego identity; the semi-structured interview was
used to ascertain specific Identity Status.

The Ego Identity Incomplete Sentences Blank

A form of semi-structured projective test known as a
sentence completion test was developed to measure ego
identity. Some advantages of this instrument (according to
Rotter, 1954, pp. 302-305) are: more economical in time
than an interview; permits freedom of response; allows for
objective scoring; some disguise of purpose; enough struc-
ture that Ss do not feel unduly threatened; variety of
stems makes it adaptable for research purposes.

The Ego Identity Incomplete Sentences Blank (EI-ISB)
(Appendix I) originally consisted of 25 stems which the S
was asked to complete "expressing your real feelings."
These original 25 stems were chosen from a pool of 50 by 5
clinically trained psychologists who made their selection
on the basis of the relevance of the items to the concept
of ego identity. (Later, two of these items were dropped
when it was found difficult to obtain agreement on their
scoring. Thus, the final total of items was 23.)

Each item is given a score of 3, 2, or 1 according to
criteria and examples provided in the EI-ISB Scoring Manual
(Appendix II). The criteria for each item were based upon
the theoretical rationale concerning response correlates
of ego identity achievement. That is, scoring criteria
were developed by asking the question: "If one has achieved
an ego identity - either by our criteria of crisis and
commitment or in terms of behaviors which Erikson indicates
are associated with identity achievement - what should his
responses be?" In addition, response examples were
obtained empirically from a pilot study.

This first pilot study used 31 male Ss taken from
introductory psychology classes at The Ohio State University.
The Ss were required to participate in an experiment for
class credit. They were distributed fairly evenly over the
four college years.

Ss were administered the EI-ISB and then asked to make
an appointment with the E at their convenience for the inter-
view. The EI-ISB's were scored before the interview, in
this first study, and individual items which might provide
leads in the interview were noted. Interviews were held in
a small room usually used for psychotherapy. The interview
was introduced to the S as part of a study on college
students' values and occupational choices. Assurance was
given that the interviews would be held in confidence.
Each interview lasted about 15 to 45 minutes, depending upon
the time necessary for the E to get a fairly clear idea of
the S's Identity Status. None of the Ss seemed to find the
interviews particularly threatening; most of them expressed
interest in the experiment and seemed to enjoy talking about
themselves.

After manuals for the EI-ISB and the interview had been
developed, EI-ISB protocols from all 31 Ss and interviews
from 20 Ss were independently rated by two clinically trained
raters for each measure. Since many of these EI-ISB items
re-appeared in the scoring manual as examples, these
particular responses were eliminated from reliability cal-
culations.

Reliability and findings

Reliability data on the EI-ISB from this first pilot study showed an average correlation[4] among the three judges on item-by-item analysis of $\bar{r}=.76$ ($p<.0005$, N of items=440). In terms of correlation of total EI-ISB scores for the 31 Ss, the $\bar{r}=.90$ ($p<.0005$, N of Ss=31). The over-all per cent of agreement on an item-by-item analysis was 77.2%. A more complete summary of this initial reliability data for both EI-ISB and Identity Status Interviews may be found in Appendix V.

It was also found that ego identity, as measured by the EI-ISB, increased with the Ss' college year. Ss were split Freshmen-Sophomore vs. Junior-Senior - $r_{pbis}=.29$ ($p<.05$, N=31).

The Identity Status Interview

A semi-structured interview (Appendix III) was con-structed to tap Identity Status in the three main areas of occupation, religion, and politics. In each of these areas, the S was to be judged in terms of which Identity Status his responses most closely corresponded to. Descriptions and examples of these responses are found in the Interview

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[4]Correlations were converted to Fisher's-z function for averaging.

Rating Manual (Appendix IV). As with the EI-ISB Manual,

the Interview Manual was based both on theoretical rationale

and examples drawn from the pilot study. Having made an

Identity Status judgment for each of the three areas, the

rater was then asked to arrive at an overall Identity Status -

that Status which, in his opinion, best represented the sum

of the Statuses in the three areas.

This method was chosen as much to give the E some

flexibility, as it was to give the S freedom of response.

It permitted the E to probe gently those areas where the S's

responses didn't seem to be consistent. It also allowed

the E to return to certain topics for clarification. It

cannot be denied that this procedure is somewhat tedious,

involving approximately a half hour per S for the original

interview and about twice this time to replay and judge his

tape. However, advantages in comprehensiveness, accuracy,

and some elimination of response bias outweigh the mainly

temporal disadvantages. And, of course, given that satis-

factory reliability can be achieved, the depth and vlexi-

bility of this procedure approach the ideal in personality

assessment.

Adaptability to environmental press

In addition, a rating of High, Medium, or Low "adap-

tability to environmental press" was included to differentiate

further Ss within an Identity Status. This variable is
intended to reflect the rater's opinion of how successful,
in general, the individual seems to be in coping with
everyday situational demands. To a much lesser degree, it
is also to be an estimate of future adaptability. While
this variable does not arise so directly from theory as do
the Identity Statuses, it has two advantages. It helps to
take account of some obvious differences among individuals
within an Identity Status; e.g., the High adaptability to
press, Identity Diffuse, "playboy" as opposed to the Low
adaptability to press, Identity Diffuse, schizoid person-
ality. It also provides a continuous distribution of
scores for Identity Status, making it more comparable for
correlational purposes with the EI-ISB scores. Thus, once
an overall Identity Status has been determined and adapta-
bility to environmental press evaluated, a number can be
assigned to the S in the following way:

Identity Achievement	High:	12
	Medium:	11
	Low:	10
Foreclosure	High:	9
	Medium:	8
	Low:	7
Moratorium	High:	6
	Medium:	5
	Low:	4
Identity Diffusion	High:	3
	Medium:	2
	Low:	1

This continuum represents the hypothesized order of the Statuses' performance on experimental measures. Hence, within any Status, High adaptability to press $\underline{S}$s should perform better than Low. However, between Statuses, a Low adaptability to press $\underline{S}$ from a higher Status should perform better than a High adaptability to press $\underline{S}$ from a lower Status.

There was some question as to the validity of this continuum in terms of Identity Status categories. The first concern was whether it might not be more theoretically sound to consider the Statuses as separate categories, each with their own distinguishing characteristics. A second question arose as to the relative positions of the Foreclosure and Moratorium Statuses. One perhaps finds the Moratorium who is struggling to achieve an identity a more sympathetic character than the Foreclosure who has, in effect, let one be achieved for him. However, both in terms of the Block (1961) study results on "role rigid" individuals as well as our own hypotheses about possible performance in an experimental situation, we decided to rate Foreclosure higher than Moratorium. As to the whole question of whether or not to make a continuum, it was decided that nothing was lost by doing this and that it might provide a useful way of looking at the data.

Reliability and findings

The first pilot study used, in addition to the $\underline{E}$, two clinically trained raters (different from the EI-ISB raters) to ascertain the reliability of Identity Status Interview ratings. The average correlation among judges on 20 $\underline{S}$s was $\bar{r}=.76$ ($p<.0005$, N=20). This correlation was based on Identity Status as a twelve point continuum. Average percentage of agreement on which of the four Statuses the $\underline{S}$ fitted was 70%. The correlation between the Identity Status continuum and overall ego identity as measured by the EI-ISB was .65 ($p<.0005$, N=31). The point biserial correlation between Identity Status and year in college was .56 ($p<.0005$, N=31). Additional reliability data is found in Appendix V.

Following this first pilot study, the scoring manuals for both the EI-ISB and the Identity Status Interview was slightly revised. The pilot study provided most of the examples found in the manuals.

Development of Tasks

The EI-ISB and Identity Status Interviews provide an answer to the question: "Can we measure it?". Next was the problem of construct situations to test their usefulness for prediction. What was needed were tasks fairly independent of the criteria for ascertaining achievement of

ego identity. There already existed two correlated measures of the latter. Also, because of their very recent development, we were as much interested in making observations on the characteristics of each Identity Status as in the validation of each one. Tasks were needed that would yield at least high-low differences and also allow for enough individual variation in performance to permit expression of differences due to Identity Status. The high-low requirement specified fairly accurate measurability; the amena-bility to individual differences requirement meant a fairly complex task. In addition, the task was to reflect, if possible, not just identity achievement but also the increment to general ego strength that ought to accompany resolution of the identity crisis. Another specification for the experimental task was that it permit the addition of a stressful element. This was to discriminate the Identity Achievement from the Foreclosure - the idea being that only under stress would differences between these two Statuses become apparent.

The tasks, then, were required to: be evaluated by criteria independent of those used to establish degree of ego identity; admit of enough measurability to discriminate between high and low Identity Status; yield observations of

individual differences in performance; be related to overall ego strength; permit the addition of a stress factor.

The Self-Esteem Questionnaire

A rather complete description of this test is to be found in the Method section. The questionnaire itself is in Appendix VI. The test consists of two types of items: those related to self-esteem and "filler" items taken from the Authoritarian Submission and Conventionality cluster of the F scale (Adorno, et al., 1950). Previous studies (Janis, 1954; deCharms & Rosenbaum, 1960a; deCharms & Rosenbaum, 1960b; Rosenbaum & Stanners, 1961) using this scale as a measure of self-esteem have found it to be related to high persuasability, acute neurotic anxiety, matching (conformity) behavior, and expression of aggression, although there is some controversy about the latter. This questionnaire will hereafter be referred to as SEQ-F, since the former "filler" items are also to be used as a variable.

In line with Erikson's statement, we would expect Identity Achievement Ss to be high on this variable. "Thus, self-esteem, confirmed at the end of each major crisis, grows to be a conviction that one is learning effective

steps toward a tangible future, that one is developing a
defined personality within a social reality which one
understands" (1950, p. 40). The Identity Diffusion Status
would be expected to score lowest. An individual in this
category is seen as having either excessively high ego
ideals, so high, in fact, that he seems to prefer to be
"nothing" rather than to attempt the impossible, or perhaps
very weak ego ideals due to disturbance in early object
relations. The latter would refer to the low adaptability
to press, schizoid pole of Identity Diffusion.

One can readily appreciate at least the apparent rela-
tionship between this variable and the Foreclosure Status
when he considers such F scale items as:

> Young people sometimes get rebellious
> ideas, but as they grow up they ought
> to get over them and settle down.
>
> Obedience and respect for authority
> are the most important virtues children
> should learn.

The submissive relationship to authority, rigidity, and
conventionality associated with the "authoritarian person-
ality" is also likely to be characteristic of individuals
who hew unusually closely to parental values and wishes.
In contrast, both Moratorium and especially Identity
Achievement Ss, by virtue of their experiencing and/or

resolving of a crisis period should have achieved a certain

flexibility and maturity of personality - a "live and let

live" orientation that the Foreclosure cannot afford and

the Identity Diffusion burlesques.

Invalidated self-definition

The SEQ-F was to be administered at the beginning of

the study and then re-administered in the last part of the

study about two months later. Immediately before the

second administration, Ss were to be given one of two types

of "invalidated self-definition." They were to be told by

the E that on the basis of interview and test data they

were both more (or less) mature than they thought they

were, and also more (or less) mature than other Ss. The

same false information was to be given for the attribute,

self-confidence.

Ss high in ego identity should be less susceptible to

this externally-provided information and their self-esteem

scores should be less affected than those Ss low in ego

identity. Thus, Ss with high Identity Status should show

less change in self-esteem scores from the first to the

second administration of the SEQ than Ss with low Identity

Status. The term, ego identity, itself connotes an internal,

as opposed to an external, locus of self-definition. To

the extent that an identity is achieved, the individual's

self-definition is less susceptible to invalidation by

outside sources (Gruen, 1960).

The use of the SEQ-F questionnaire in conjunction with

the treatment of "invalidated self-definition" was to yield

the following measures: an initial measure of extent of

self-esteem as related to achievement of ego identity;

differences among the Identity Statuses in the extent of

endorsement of F scale items; amount of change in SEQ scores

from the first to the second administration as related to

overall ego identity and the Identity Statuses; and Ss'

reactions to the invalidated self-definition - for they

were not to be only passively exposed to the communication

but were to be asked to account for the (falsified) findings.

Concept Attainment Task under stress

A second experimental task was chosen to reflect the

effects of a general increment to ego strength presumably

contingent upon achievement of ego identity. This task was

also to be stressful in order to assess persistence of ego

functioning in the face of interfering stimuli -- in this

case, presumably, internal stimuli. The one chosen was the

concept attainment task developed by Bruner, Goodnow, and

Austin (1956) as modified by Weick (1962).

In this task, the S is required, through a process of
elimination, to discover which combination of attributes
the E has in mind, having been given first an example of
the concept. This task has been characterized by Weick
(1962, p. 7) as one which is "fairly complex, allows for
wide variations in performance, requires effort to be
accomplished, ... and provides several operational measures
of performance." More detailed description of the task is
found in the Method section.

Stress in the situation was to consist of evaluation
apprehension and oversolicitousness on the part of the E.
Ss were to be told that the test had relevance to both their
intelligence and academic performance; in addition, they
were confronted with an E who continuously reassured them
against fears they might not even be experiencing. A brief
discussion of a second pilot study, which was undertaken to
determine whether or not these conditions were, in fact,
stressful, is found in the Method section.

In addition to measures of overall quality of per-
formance, this can also be administered so as to yield level
of aspiration measures (Lewin et al., 1944).

One would expect those high in ego identity and those
in higher Identity Statuses to perform more successfully on

this stressful intellectual task. This prediction could

be made on the basis of the usual definition of ego strength

alone. For the business of the ego is to moderate between

pressing internal stimuli, in this case, presumably, anxiety,

and environmental demands, here seen as completion of a

complex task. If the successful solution of each psycho-

social crisis increases the individual's overall ego

strength, then those who have achieved an ego identity should

have developed those behaviors necessary to cope with the

experimental situation.

A similar line of reasoning holds for level of

aspiration measures. One would expect more realistic

goal-setting from those high in ego identity -- if for no

other reason than the improved reality-testing of those

individuals with "stronger" egos.

Overview

The study is to be divided into two sections. The

first part will involve measurement of subject variables.

These will be ego identity (EI-ISB), Identity Status

(Identity Status Interview), and initial self-esteem and

endorsement of authoritarian submission and conventionality

(SEQ-F). The second part of the study will attempt to

test hypotheses made on the basis of measured subject

variables. The experimental conditions under which they will be tested are these: quality of performance in the Concept Attainment Task under the stress of evaluation apprehension and oversolicitousness; realistic goal-setting assessed by level of aspiration measures in the Concept Attainment Task; reactions to both positive and negative invalidated self-definitions; and differential change in self-esteem after having been given the invalidated self-definition.

CHAPTER II

HYPOTHESES

The purpose of the study is twofold: to investigate the construct validity of the concept, ego identity, as defined by the score on the Ego Identity Incomplete Sentences Blank (EI-ISB); to investigate the construct validity of the four Identity Statuses as determined by the semi-structured Identity Status Interviews.

A note should be made about a particular characteristic of this study. Because a main criterion of a construct's value is its utility for prediction, this research has employed an experimental rather than observational approach. However, particularly in the case of the Identity Statuses, we were as much concerned with the further specification of the characteristics of the Identity Statuses as we were with immediate predictions. Accordingly, a few hypotheses are guidlines for observations rather than predictions of performance on the experimental tasks.

Ego Identity

The general prediction is that Ss who score high on the EI-ISB will attain high Identity Status, perform better on the Concept Attainment Task under stress (CAT), and be more resistant to the invalidated self-definition (ISD). Specific hypotheses are these:

1. Identity Status

    HYPOTHESIS: There will be a significant positive relationship between EI-ISB scores and Identity Status scores, with Identity Status treated as a continuum.

2. Self-esteem

    HYPOTHESIS: There will be a significant positive relationship between EI-ISB scores and SEQ scores.

3. Year in college

    HYPOTHESIS: There will be a significant positive relationship between EI-ISB scores and lower vs. upperclassmen.

4. Change in self-esteem

    HYPOTHESIS: There will be a significant negative relationship between

EI-ISB scores and the amount
of change in SEQ scores from
the first to the second adminis-
tration. The higher the ego
identity, the lower the change
score.

5. Concept attainment under stress

HYPOTHESIS: There will be a significant
negative relationship between
EI-ISB scores and CAT scores.
This will hold for all three
performance measures taken from
the CAT: overall points, points
for requests plus guesses, and
points for time. (Since high
score on the CAT reflects poor
performance, the higher the
EI-ISB score, the lower the CAT
score will be.)

6. Level of aspiration measures (LOA)

HYPOTHESIS: There will be a significant
negative relationship between
those LOA measures associated

with unrealistic goal-setting
and EI-ISB scores. These measures
are: very high or very low D
scores and number of unusual
shifts.

Identity Status

Predictions with respect to Identity Status, while
reflecting to some extent high-low ordering such as those
derived from ego identity, also deal with characteristics
of the specific categories. Statements such as "those high
in Identity Status" refer to the following ordering of
Statuses: Identity Achievement, Foreclosure, Moratorium,
and Identity Diffusion - with each Status subdivided accord-
ing to the individual's estimated adaptability to environ-
mental press. The specific hypotheses with respect to
Identity Status are:

7. Self-esteem

HYPOTHESIS: Those high in Identity Status
will obtain a significantly high-
er initial SEQ score than those
low in Identity Status.

8. Year in college

HYPOTHESIS: Upperclassmen will be signif-
icantly higher in Identity Status
than lowerclassmen.

9. Authoritarian submission and conventionality (F)

> HYPOTHESIS: Subjects in the Foreclosure
> Status will obtain significantly
> higher scores on the F scale
> section of the SEQ-F than subjects
> in the other three Statuses.

10. Change in self-esteem

> HYPOTHESIS: Those high in Identity Status
> will show a significantly smaller
> change in self-esteem scores
> following ISD than those low in
> Identity Status.

11. Reactions to invalidated self-definition (ISD)

> HYPOTHESIS: Each Identity Status should show
> qualitative differences in their
> reactions to ISD. No a priori
> categories have been set up for
> these reactions.

12. Concept attainment under stress

> HYPOTHESIS: Subjects in the Identity Achieve-
> ment Status will receive signif-
> icantly lower (better) scores on
> the CAT than subjects in the

Identity Diffusion Status.

This relationship will hold for

all three performance measures

taken from the CAT: overall

points, points for requests plus

guesses, and points for time.

13. Level of aspiration measures (LOA)

HYPOTHESIS: Those subjects high in Identity

Status will make significantly

fewer LOA estimates character-

istic of unrealistic goal-setting

than those subjects low in Identity

Status. The measures are very

high or very low D scores and

unusual shifts.

The means of testing these hypotheses will be discussed
in the following chapter.

CHAPTER III

METHOD

This chapter describes (1) the selection of $\underline{S}$s;
(2) the measurement of subject and task variables; and (3)
the experimental procedure.

Subjects

Sixty-five of the eighty-six male $\underline{S}$s who served in the
experiment were obtained from two introductory psychology
courses taught by the author at Hiram College. An addi-
tional twenty-one were recruited from advanced history
and religion classes. Participation in the study was made
a course requirement in the psychology classes, so that
100% of the available $\underline{S}$s were used. In the other two classes,
the same requirement was not possible and these prospective
$\underline{S}$s were approached on the following bases: (1) their
participation would add to the growing body of knowledge in
the science of psychology; (2) they would have a chance to
learn more about themselves; and (3) participation in a
psychological experiment would be a unique experience. This
procedure netted twenty-one out of twenty-three possible
$\underline{S}$s (91%). These particular classes were chosen because of

61

their relatively high proportion of upperclassmen in comparison with the introductory psychology sample. These eighty-six Ss represented about one-fifth of the total male population at the college.

The Ss were informed of the experimental procedure ("an interview and performance on an experimental task") but not of the variables being investigated. All Ss were promised a mimeographed hand-out at the completion of the study explaining the rationale of the experimental tasks and summarizing the results.

Use of confederate experimenters

Concomitant with the advantage of obtaining a proportionately sizeable sample is a disadvantage of running a study on a small (950 student body) campus: the problem of inter-subject communication. While this was, to some extent, unavoidable in the Identity Status interviews, it could at least be made known in many cases by mildly probing interview techniques. However, it was feared that the experimental task would constitute such a novel phenomenon that if it were to be administered over any long period of time, Ss might be uncontrollably contaminated. Also, in terms of the research done on "experimenter bias"

(Marcia, 1961; Rosenthal, 1959), there is an advantage in terms of experimental design in using a sample of experimenters, none of whom is aware of $\underline{S}$s' standing on the independent variables.

In view of these considerations, the study employed 10 confederate $\underline{E}$s (hereafter, task $\underline{E}$s) who helped administer the Concept Attainment Task (CAT) in one twelve-hour period. All $\underline{E}$s had been members of the author's class in psychological testing and had taken three or more courses in psychology. All task $\underline{E}$s had previously assisted in a pilot study involving the same task, CAT under stress, during the previous quarter. The task $\underline{E}$s consisted of 7 males and 3 females; there was no significant difference among $\underline{E}$s in the amount of CAT performance decrement due to stres induced in the pilot study.

The task $\underline{E}$s' training consisted of the following: (1) a forty-five minute briefing session before the pilot study, concerning the nature of the experimental variables; (2) a check-out of procedure, running the $\underline{E}$ as $\underline{S}$; (3) running at least three "stress" and three "non-stress" $\underline{S}$s in the pilot study; (4) a second checkout using the $\underline{E}$ as $\underline{S}$. None of the task $\underline{E}$s had knowledge of the Identity Status of

any of their Ss either prior to or following the CAT admin-
istration. Neither the Ss' Identity Status Interviews nor
their EI-ISB's were scored until after the CAT.

Measurement of subject variables

EI-ISB. This 23 item test requires the S to complete
a sentence "expressing his real feelings," having been given
a leading phrase or clause, known as a stem. The advantages
of this form of projective technique have been previously
described. (see p. 38) Stems were selected and a manual
designed according to behaviors which Erikson (1956)
suggests are associated with the achievement of ego identity.
Each item is given a score of 3, 2, or 1 according to the
congruence of the S's response with identity achievement.
Scoring criteria for each item are found in the EI-ISB Man-
ual (Appendix II).

All Ss completed the test at one sitting. Due in
part to the innocuous nature of the stems, there was little
resistance to the test; the most frequent comment was that
Ss found it "interesting," although a very few Ss complained
about the ambiguity of some stems. (E.g., "why you could
just put down anything.")

Identity Status Interview. The author assigned an
Identity Status to each S on the basis of a 15-30 minute

interview. These interviews were held in the E's office, a particularly "homey" room, formerly part of a personal dwelling. All interviews were tape recorded, and the Ss were told beforehand that

> We're recording all the interviews so
> that we have the data available to go
> over later. I can assure you that
> everything we say will be kept in con-
> fidence. Only one other psychologist
> and myself will have access to the tapes.

No S objected to this procedure.

A complete description of the criteria for determining Identity Status is to be found in the Manual for Identity Status Interviews (Appendix III). Briefly, each S was evaluated for each of three areas: occupation, religion, and politics - the latter two were combined to yield ideology. An overall Identity Status of Identity Achievement, Foreclosure, Moratorium, or Identity Diffusion was then assigned and an estimate of the S's adaptability to environmental press (high, medium, or low) was made.

Relationship between EI-ISB and Identity Status Interview. Although sharing many of the same criteria and expected to yield a moderately high correlation, the EI-ISB and the Identity Status Interview are intended to reflect different aspects of ego identity. The EI-ISB is intended as an overall measure of the extent to which the S has met

the criteria for establishment of ego identity. The

Identity Status Interview is designed to categorize the S

according to his particular style of dealing with the iden-

tity crisis.

Measurement of dependent variables

SEQ-F (Appendix VI). This is a twenty-item question-

naire developed by deCharms and Rosenbaum (1960a) on which

the S indicates his degree of endorsement (6 point scale,

plus 3 to minus 3) of statements concerning both his gen-

eral feelings of self-confidence and worthiness as well as

statements reflecting authoritarian values in the areas of

submission and conventionality. An example of a self-

esteem item is: "I feel capable of handling myself in most

social situations." An F scale item is: "Obedience and

respect for authority are the most important virtues children

should learn." This test bears the title "Value Profile" on

the form that Ss fill out.

The initial SEQ-F was administered at the same time

as the EI-ISB in a classroom setting. The second adminis-

tration of SEQ-F was during the experimental situation

following the invalidated self-definition. The second

SEQ-F was also administered in a group setting, although

not in a classroom.

Variables of main interest on this questionnaire were (1) initial self-esteem score; (2) initial F score; (3) relationship between self-esteem and F scores; and (4) change in self-esteem following invalidated self-definition.

Concept Attainment Task. This experimental task, developed by Bruner, Goodnow, and Austin (1956) and modified by Weick (1961), requires the S to arrive at a certain combination of attributes of cards by a process of elimination. The S is faced with a poster on which are displayed 32 cards. Each card contains five attributes: shape (square or circle), size (large or small), color (black or white), number (one or two), and position (right or left). The S was given a set of 7 problems, each using one, two, or three card characteristics. At the beginning of a problem, the task E would point to a card possessing all of the attributes he had in mind; from then on, the S might employ a combination of two strategies in attaining the E's concept. He might successively eliminate certain attributes by pointing to cards and asking the task E if that card were positive or negative for the concept attributes. Every request cost the S 5 penalty points. The S might also guess directly at the concept; e.g., "square, black." Every guess cost the S 10 penalty points. Five penalty points

were assigned for every <u>thirty</u> <u>seconds</u> that passed before <u>S</u>

attained the concept. Complete instructions to <u>S</u>s for the

CAT are found in Appendix VII.

<u>S</u>s were also asked to make time estimates of performance

on their next problem in view of their performance on the

immediately preceding one. This made possible several

level of aspiration measures (Lewin, <u>et</u> <u>al</u>., 1944).

The entire task was performed under "stress" condi-

tions which will be described in the <u>Treatment</u> <u>Conditions</u>

section.

<u>Quality</u> of performance on the CAT was assessed by the

following measures: (1) overall CAT score (time plus

requests and guesses penalties); (2) points for time alone;

(3) points for requests and guesses alone; (4) number of

"<u>give-ups</u>" (problems which <u>S</u> refused to complete).

<u>Level of aspiration</u> measures were these: (1) D score

(the algebraic average of the differences between a <u>S</u>'s

stated expectancy for a problem and his immediately preceding

performance on a similar problem); (2) initial expectancy

(<u>S</u>'s estimate of time to complete the first problem); (3)

number of shifts in estimate; and (4) number of unusual

shifts in estimate (down after success, up after failure).

<u>Reactions to invalidated self-definition</u>. One of two

treatment conditions to be described in the next section

consisted of informing some Ss (positive invalidated self-definition) that they were both "better" (i.e., more mature, more self-confident) than they estimated themselves to be and "better" than other Ss; other Ss (negative ISD) were told that they were "worse" (i.e., less mature, less self-confident). All Ss were then asked to account for this discrepancy between their "stated" self-concept and their "real" self as revealed in tests and the interview. These reactions were tape recorded. No a priori categories were set up with which to classify reactions since there were insufficient grounds for categorizing them in an established system. As is detailed more fully in the Results section, they were eventually coded into three categories: "negative interpretation" (the S was given positive ISD but perceived it as negative); "complete acceptance" (the S was given negative ISD and offered evidence in favor of the false information); and "modesty" (the S was given positive information and enthusiastically accepted it, saying that he was habitually modest). In addition, each S was assigned a rating on a 5 point scale for the degree to which he seemed to believe the ISD.

Treatment conditions

Stress in the CAT. Stress was defined here as
externally imposed conditions which tend to impair per-
formance. Although this is a far broader definition
than Lazarus et al (1963) would agree to, our purpose
here is not to study the stress itself, but the performance
of different Identity Statuses on the CAT under stressful
conditions. The particular type of stress used was both
appropriate to the situation and to the Ss' general motiva-
tion as college students. For the particular purposes of
this study we need to know only: Is the stress appropriate?
And is it effective? The particular types of stress used
were "evaluation apprehension" and over-solicitousness.

Evaluation apprehension was created when the task E
gave the S the following information prior to beginning the
CAT:

> By the way, I thought you might be
> interested to know that this test is
> related to tests of intelligence and
> that it's been found to be one of the
> best single predictors of success in
> college. So, of course, you'll want
> to do your very best.

A quotation from Riecken (1958) is apt here:

> The subject may fear the experimenter
> cannot or will not take such a detached
> view of him but will, instead, take an
> evaluative view of his performance and

> will make some use of this information
> to affect some future enterprises in
> which the subject may be engaged. ....
> Further, in all his previous experiences
> with teachers, the subject has undoubtedly
> learned that they are capable of invoking
> past performance both "in" and "out" of school
> as the basis for present judgments and recom-
> mendations for the future. (p. 8)

The above instructions were designed to capitalize on
this apprehension.

Over-solicitousness was created during the CA^T per-
formance by the task E who hovered over the S, asking him if
he were comfortable, consoling him (against what?), advising
him not to "tense up," not to "make it harder on yourself,"
and, finally, sighing with relief for the S that the "last
one" was coming up. This over-solicitousness was designed
to complement evaluation apprehension by reassuring the S
against fears he may not have contemplated, and if he had,
by making them more real and salient.

Pilot study data on stress conditions

That these operations are, in fact, stressful was
determined in a pilot study in which the same task Es ran
56 Ss (27 males and 29 females) in the CAT under stress and
non-stress conditions. In the latter, the stress procedures
were simply omitted. Each E ran about 3 stress and 3 non-
stress Ss. For all task Es, stressed Ss performed more
poorly than non-stressed ones. (see Table 1)

An interesting finding in this study, apart from the effectiveness of stress, was that stressed $\underline{S}$s differed from non-stressed ones more in terms of frequency of response (i.e., requests and guesses) than in terms of total amount of time taken (Table 1). It would seem that $\underline{S}$s under these stressful conditions responded more often and less accurately than $\underline{S}$s not stressed.

TABLE 1

CAT performance for
Stress vs. Non-Stress Conditions

Groups compared	$\underline{N}$	$\underline{M}$	$\underline{SD}$	$\underline{t}$	$\underline{p}$
Total points					
Non-stress	26	751	201		
vs.				2.61	<.02
Stress	30	948	430		
Requests plus guesses					
Non-stress	26	602	155		
vs.				2.91	<.01
Stress	30	762	372		
Time					
Non-stress	26	891	362		
vs.				1.33	<.20
Stress	30	1118	520		

In the final study, CAT scores from 2 $\underline{S}$s were dropped. One $\underline{S}$ seemed to be suspicious of the stress conditions,

telling his task E that his roommate had been in a similar
experiment the previous quarter and that he didn't believe
either the "intelligence business" nor was he falling for
the task E's apparent concern for him. The other S began
reacting so bizarrely (pounding the table and swearing) that
his task E suspended stress conditions.

Invalidated self-definition. This treatment, which
succeeded the CAT and directly preceded the second adminis-
tration of the SEQ-F, consisted of giving the S false infor-
mation concerning the relationship between his evaluation
of himself and his "actual personality." This information
was given to the S by the E in the same office in which the
original Identity Status Interview was held. Ss were
successively and alternately "positive" or "negative" as
they arrived in the office.

As S came into the office he found the E intently
scanning a data sheet. After he had been seated and asked
what he thought of the CAT he was told:

> I've been looking over some of the data
> and it seems that while you consider
> yourself less (more) mature than other
> Ss, you actually come out as being more
> (less) mature. Is there any way you can
> account for this discrepancy? (Pause for
> S's response.) This seems to hold up
> also for self-confidence. It seems that
> you consider yourself as having less (more)
> self-confidence than other Ss, yet you
> actually come out having more (less).

If $\underline{S}$ questioned this last statement he was told that $\underline{E}$ meant self-confidence on a "deeper level." Relegating things to a "deeper level" seemed to have an unusual explanatory efficacy.

Several $\underline{S}$s seemed to be so affected by the information - two asked if counseling were available - that immediately following the second SEQ-F administration, $\underline{E}$ informed them of the deception. All other $\underline{S}$s received a postcard in the next mail which bade them to "disregard any information you received in the psychological experiment yesterday; it was deliberately falsified in order to create an experimental condition."

Procedure

Following is the sequence of events in the experiment:

$\underline{S}$s in the author's class in introductory psychology were told that a course requirement for the quarter would be their participation in a study. The EI-ISB and SEQ-F were then passed out and completed in class.

Approximately three weeks later, two other classes, one in religion, the other, history, were approached for their cooperation in the project. The two questionnaires were then administered to these classes.

Following administration of the tests to both classes,
all Ss were told to make an appointment for an interview
by putting their name on a sign-up sheet. Ss who did not
show up for their appointments were recontacted. Only
three Ss who had signed up for an interview failed to
appear. One of these had dropped out of school.

Identity Status interviews were held in the E's office.
Each lasted from fifteen minutes to half an hour and
covered the areas mentioned before. The period of inter-
viewing lasted for about two months. Every S was told at
the completion of his interview that he would be notified
of the data of the experimental situation. If S inquired
about the purpose of the experiment, he was told that E
was trying to categorize people on the basis of the tests
taken in class and the interview in order to predict perfor-
mance in the experimental situation. Further questions
were answered: "I just can't tell you that; it would mess
up the last part of the study."

Confederate Es were checked out on their procedure
about a week prior to the experimental situation. About
this time, another sign-up sheet was passed around in
classes for Ss to indicate at what hour of the appointed
day they would be able to come. Ss could be run from 8:00

AM until 8:00 PM, with a possibility of 10 Ss run per hour.
Each S received a postcard the day before the experiment
reminding him of his time.

When S arrived at the Psychology Building he was met
by the first available task E who took him to a small room
in which were two chairs, a table, a poster with the CAT
characteristics, a stop watch, penalty cards, and a scoring
sheet. The task E seated the S, read him the instructions
found in Appendix VII, and gave him the list of character-
istics called a Reminder Sheet (Appendix VIII). After the
S's questions were answered, the task E informed him of the
relationship between CAT performance and intelligence and
college grades. Following this, the "over-solicitousness"
began with the task E's making certain the S was comfortable
and stating that they would only begin when S was ready.

S was told that "most people solve the first problem
in three minutes"[1] and asked how long he expected to take.
The time was noted down and the task E pointed to the first
exemplar card. Every time S asked whether a card was
positive or negative for the concept attributes, task E
answered and turned over a 5 point penalty card; task E
turned over a 5 point penalty card for every thirty seconds
that passed; he turned over two 5 point cards (i.e., 10

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[1]Some Ss were accidentally told thirty seconds.

points) for every guess at the concept. Penalty cards ran cumulatively from 5 to 50, so that after every 50 penalty points, the deck was turned over and begun again. Following a trial, the S was told: "That took you about _____; how long do you think it will take you to solve the next problem?" After the S's estimate was made, task E made some solicitous statement. These were cued for him on the scoring sheet by means of a few key words (see Appendix IX). Comments made after each problem were these:

Problem 1. : "Now there's nothing to worry about; just try and do your very best."

Problem 2. : "You're doing fine. Most people end up doing better than they think they did."

Problem 3. : "You'll just make it harder on yourself if you tense up. Just relax. There are only a few more."

Problem 4. : --------------------------------------

Problem 5. : "Just relax now - you're doing fine."

Problem 6. : "Well, now, only one more to go."

When the CAT was finished, task E solicited the S's cooperation in keeping the task a secret until the end of the day. He then told S to have a seat in the hall and that: "Mr. Marcia will see you in just a minute." The E asked the S into his office where he gave him the ISD condition - positive or negative depending upon what the previous S had been given.

Except in a very few cases, S was then sent to an
upstairs lecture room to take the SEQ-F for the second time.
He was told that this would be his last task and thanked
for his participation. In those few cases were negative
ISD seemed to upset the S unduly, he was told to report
back to the author after he had completed the questionnaire.
He was then informed of the false information. Administration of the SEQ-F was proctored by another confederate
E.

Each S took from about forty-five minutes to an hour
to run through the experimental situation. The 86 Ss were
run in a twelve hour period.

The following day, each S received a postcard from
the E explaining the false information.

CHAPTER IV

RESULTS

Preliminary Analyses

Prior to the major analyses of the data, a series of
preliminary analyses were undertaken. These are described
in the following sections.

Sources of error

Two potential sources of error to be investigated
were the possible differences in $\underline{S}$s' responses to the $\underline{E}$ as
a result of his being their classroom instructor and the
influence of $\underline{S}$s' intelligence on both their Identity Status
classifications and their Concept Attainment Task per-
formances.

The first possibility was investigated by comparing
the Identity Statuses of $\underline{S}$s from $\underline{E}$'s classes with those
from the other two classes (Table 2). A non-significant
chi-square of 3.00 (df=3) indicates that assignment of
Identity Status was not significantly influenced by the
classes from which the $\underline{S}$s came.

78

TABLE 2

Subjects Identity Status According to
Author's vs. Others Classrooms

Class	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff.
E's	11	21	17	16
Others	7	4	5	5

x^2 3.00

$p < .30$

NS

Intelligence test scores were obtained for 78 of the
86 Ss. Most of these scores were based on group administered
tests taken when the S was in high school. Such a wide
variety of tests were available among the Ss (e.g., several
forms of the Otis, California Test of Mental Maturity,
Henmon-Nelson, SRA-PMA, Terman-McNemar, and Pintner) that
no set of scores from a single test could be used to com-
pare Ss. Although the procedure is admittedly questionable,
all the obtained and estimated IQ's were treated as compar-
able and grouped together for purposes of establishing
means and standard deviations. The choice lay between this
possibly distorted estimate of intellectual performance and

no single estimate at all. For those 8 Ss for whom data
were not available, an IQ was estimated on the basis of
either high school or college (if available) grades.[1]

It was found that while IQ scores correlated highly
with CAT performance (r^2=-.55, p $<$.0005, df=82),[2] they seemed
to bear no relationship to the Ss Identity Statuses, and
very little to his EI-ISB score. A test computed between
the highest and lowest Status in IQ yielded a non-significant
t=1.70, p $<$.20[3], df=37 . These data are found in Tables 3,
4, and 5. Thus, we may conclude that intelligence is not a
contaminating factor in the hypothesized relationship
between EI-ISB scores, Identity Status, and CAT performance.

TABLE 3

Relationship between Total CAT Scores,
EI-ISB Scores, and IQ

Measures correlated	r	p	N
IQ scores and CAT scores	-.55	$<$.0005	84
IQ scores and EI-ISB scores	.15	NS	86

----

[1]The criteria for assigning IQ's here was: Ss with
point-hour average 2.00-2.50 received IQ 105; 2.50-3.00,
IQ 115; 3.00-3.50, IQ 125; 3.50-4.00, IQ 135.

[2]All correlations in this chapter are Pearson product-
moment correlations.

[3]All significance levels for tests are based on two-
tailed tests.

TABLE 4

IQ Scores According to Identity Status

	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident.Diff.
N	18	24	23	21
M	118	116	117	112
SD	9.37	8.21	10.05	10.09

TABLE 5

Analysis of Variance of IQ Scores
For the Four Identity Statuses

Source	df	MS	F
Between Statuses	3	126.65	1.356
Within Statuses	82	93.43	NS
Total	85		

Effectiveness of experimental manipulation

Two forms of experimental manipulation were employed

in the study. The first involved the addition of stress

to the CAT. The effectiveness of this procedure had been

determined previously in a pilot study. The second form of

experimental manipulation consisted of giving the Ss an

"invalidated self-definition." (ISD)

It would be reasonable to expect that Ss given positive

information would show an increase in self-esteem if the

manipulation were successful - also, that Ss given negative

information would show lowered self-esteem. Thus, the

effectiveness of the manipulation should be manifested in a

change in SEQ scores in either a positive or negative

direction depending on whether the S was given positive or

negative information. Thus, changes in SEQ scores following

ISD might be either "expected" (consistent with ISD) or

"unexpected" (inconsistent with ISD) changes. For example,

Ss given negative ISD who then obtained higher SEQ scores

on the second administration would be "unexpected" changers.

There were 42 Ss who changed in the expected direction,

35 who changed in an unexpected direction, and 9 who showed

no change. This finding casts doubt on either the effective-

ness of the ISD, the means of measuring self-esteem, or

both.

A more detailed analysis of the relationship between

the ISD treatment and SEQ change was carried out. In order

to see if any groups departed significantly from zero in

their SEQ change score as a function of positive or negative

ISD, the t tests found in Table 6 were run. The failure of

any of these t's to reach significance indicates that the

ISD condition had little effect on Ss' self-esteem scores.

TABLE 6

Change in SEQ score from Zero as a
Function of Positive or Negative
ISD for Identity Statuses

Groups compared	N	M	t
Positive ISD			
Identity Achievement	9	1.00	.66
Foreclosure	12	- .50	.27
Moratorium	11	-2.46	1.27*
Identity Diffusion	11	3.45	1.60
Negative ISD			
Identity Achievement	9	3.44	1.56*
Foreclosure	12	-3.33	1.96**
Moratorium	12	-1.42	.83
Identity Diffusion	10	-1.00	.36

*$p < .20$ <u>NS</u>
**$p < .10$

Thus, either the ISD was not sufficient to elicit

changes in self-esteem, or the SEQ, as it was administered,

was an insensitive instrument. That is, either the treat-

ment condition didn't "take" or the measuring instrument

didn't record the changes it produced. Both of these

alternatives are considered in the Discussion chapter.

Reliability of measurement

Although inter-scorer reliability had been investigated previously in pilot studies for the EI-ISB and Identity Status interviews, it was decided to re-evaluate them in view of the recent origins of these measures.

Twenty EI-ISB's were scored independently by three judges, one of whom was the E. Agreement was assessed on two levels, item by item and overall score, and by two methods, percentage of agreement and correlation. These data are presented in Tables 7 and 8.

Average item-by-item percentage of agreement was 74.3%; average item-by-item correlation was $\bar{r}^4 = .94$. Average correlation among the three judges on total score was $\bar{r} = .73$. Considering the present stage of development of this measure, these reliability figures appear satisfactory.

TABLE 7

Percentages of Item-by-Item Agreement
on EI-ISB Scores among Three Judges

Judges	Per cent of agreement
A with B	78%
B with C	72%
A with C	74%
Overall per cent of agreement	74.3%

[4] All averaged r's are based on conversions to Fisher's z function.

TABLE 8

Coefficient of Reliability on
EI-ISB scores among Three Judges

Judges	$\underline{r}$	$\underline{p}$	$\underline{N}$
Item by item			
A with B	.96	< .0001	920
B with C	.92	< .0001	920
A with C	.93	< .0001	920
Average item by item correlation	.94		
Total scores			
A with B	.76	< .0005	20
B with C	.73	< .0005	20
A with C	.70	< .0005	20
Average total score correlation	.73		

Twenty Identity Status interviews were rated independently by three judges, one of whom was the $\underline{E}$. Agreement was assessed both by percentage of agreement among the judges and by correlation. These data are found in Tables 9 and 10. The overall percentage of agreement on Identity Status was _75%_; the average correlation was $\bar{r}=.91$.[5] In general, the reliability of both measures, the EI-ISB and Identity Status Interviews seems adequate.

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[5]All correlations in which Identity Status is a variable involve treating the Statuses as if they constituted a continuum.

TABLE 9

Percentages of agreement on
Identity Status Interview

Judges	Per cent of agreement
A with B	80%
B with C	75%
A with C	70%
Overall per cent of agreement	75%

TABLE 10

Correlations of Reliability in
Identity Status Interviews

Judges	r	p	N
A with B	.96	$<.0005$	20
A with C	.88	$<.0005$	20
B with C	.87	$<.0005$	20
Average correlation	.91		

Main Analyses

Ego identity and Identity Status

Three techniques were employed to assess the relation-
ship between overall ego identity as measured by EI-ISB and

TABLE 12

Analysis of Variance between
Identity Statuses in EI-ISB Scores

Source	df	MS	F
Between Statuses	3	109.28	5.42
Within Statuses	82	20.16	
		$p < .01$	
Total	85		

It was found that $\underline{Ss}$ in the Identity Achievement Status received a significantly higher EI-ISB score than did Identity Diffusion Ss ($t=3.89$, $p < .001$, $df=37$), and that the first three Identity Statuses taken together received significantly higher EI-ISB scores than did Identity Diffusion ($t=3.62$, $p < .001$, $df=84$). Thus, the distinctive group with respect to EI-ISB scores appears to be Identity Diffusion.

These findings lend some support to the hypothesized relationship between overall ego identity and Identity Status. However, the absence of a higher degree of relationship between the two indicates that although they reflect a similar component, they are not identical in what they measure. Also, the lack of differentiation among Identity Achievement, Foreclosure, and Moratorium with respect to EI-ISB scores

Identity Status as determined by the Identity Status Inter-

views. (Data on which the following tests were based are

found in Table 11.) The techniques involved a correlation

(to ascertain presence and extent of hypothesized linear

relationship) between EI-ISB and Identity Status (r=.33,

p $<$.005, df=84), an analysis of variance[6] (Table 12) among

the four Statuses (F=5.42, p $<$.01, df=3.82), and t tests

between individual Statuses. (Table 13)

TABLE 11

EI-ISB Scores for Identity Statuses

	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff.
N	18	24	23	21
M	48.28	46.17	48.09	43.33
SD	5.10	4.62	4.23	3.52

[6]All analyses of variance are one-way analyses for
sub-groups of unequal size (Walker and Lev, 1953, pp. 212-
216) unless stated differently. The Fmax test (Walker and
Lev, 1953, pp. 192-192) was used to test for homogeneity of
variance. In cases of heterogenous variance, internal
comparisons were made by using the variance estimates based
on the particular groups being compared.

suggests that the instrument does not make fine enough distinctions to discriminate among these groups.

TABLE 13

Differences between Identity Statuses
in EI-ISB Scores

Groups compared	$\underline{N}$	$\underline{M}$	$\underline{SD}$	$\underline{t}$
Identity Achievement	18	48.28	5.10	
vs.				1.37*
Foreclosure	24	46.17	4.62	
Foreclosure	24	46.17	4.62	
vs.				1.41*
Moratorium	23	48.04	4.23	
Moratorium	23	48.04	4.23	
vs.				3.94**
Identity Diffusion	21	43.33	3.52	
Identity Achievement	18	48.28	5.10	
vs.				3.89**
Identity Diffusion	21	43.33	3.52	
Identity Achievement plus				
Foreclosure plus Moratorium	65	47.43	4.73	
vs.				3.61**
Identity Diffusion	21	43.33	3.52	

*p $<$ .20 $\underline{NS}$
**p $<$ .001

Self-esteem

Initial self-esteem scores (SEQ_I) were compared with EI-ISB scores, Identity Status, initial F scale scores (F_I),

and overall CAT performance scores. A summary of these results is found in Tables 14, 15, and 16.

The only significant relationship found here was between EI-ISB scores and SEQ_I (r=.26, p $<$ .01, df=84) as hypothesized. However, the predicted relationship between Identity Status and SEQ_I was not confirmed (r=.05, NS, df=84; and F=.66, NS, df=3/82). A t test between Identity Achievement and Identity Diffusion yielded t=1.37 (p $<$ .20 NS, df=37), while a t test comparing Moratorium and Identity Diffusion yielded t=1.86 (p $<$ .10, df=42).

TABLE 14

Relationship of EI-ISB Scores, Identity Status,
F_I, and overall CAT Scores to SEQ_I

Measures correlated	$\underline{r}$	$\underline{p}$	$\underline{N}$
SEQ_I and EI-ISB	.26	$<$ .01	86
SEQ_I and Identity Status	.05	NS	86
SEQ_I and F_I	-.03	NS	86
SEQ_I and overall CAT	-.03	NS	84

TABLE 15

Initial SEQ Scores According
to Identity Status

	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff.
$\underline{N}$	18	24	23	21
$\underline{M}$	45.28	44.92	47.26	43.05
$\underline{SD}$	10.46	9.14	6.74	7.94

TABLE 16

Analysis of Variance of SEQ_I Scores
for Identity Statuses

Source	$\underline{df}$	$\underline{MS}$	$\underline{F}$
Between Statuses	3	50.71	.66
Within Statuses	82	77.33	$\underline{NS}$
Total	85		

It appears that while $\underline{S}$s' self-esteem is related to overall ego identity, it does not differ significantly among the four Statuses, nor is it related to either authoritarian submission and conventionality or to CAT performance.

Year in college

Ss' year in college was compared with EI-ISB scores, Identity Status, and F_I scores.

The relationship between year in college and EI-ISB scores was investigated by means of analysis of variance. Data for this analysis are found in Table 17. The analysis is summarized in Table 18. A non-significant r of .75 (df=3/82) suggests no relationship between EI-ISB scores and S's year in college. This is supported by the first t test found in Table 21 between Freshmen plus Sophomores and Juniors plus Seniors which yields a non-significant t of 1.15 (df=84).

TABLE 17

EI-ISB Scores for Ss' Year in College

| | Year in college | | | |
	Freshman	Sophomore	Junior	Senior
N	41	27	10	8
M	46.17	45.22	46.70	48.75
SD	5.15	7.45	4.69	4.05

TABLE 18

Analysis of Variance of EI-ISB Scores
for Year in College

Source	df	MS	F
Between Years	3	26.77	.75
Within Years	82	35.82	
Total	85		NS

An analysis of variance for data in Table 19 concerning
the relationship between Identity Status scores and year in
college did not yield a significant F ratio. (Table 20)
However, a t test comparing Freshmen plus Sophomores with
Juniors plus Seniors indicates a difference in Identity
Status scores at the .05 level. (Table 21) This finding
furnishes very limited support for the hypothesis of an
increase in Identity Status with increase in year in college.

TABLE 19

Identity Status Scores for Ss' Year in College

	Year in college			
	Freshman	Sophomore	Junior	Senior
N	41	27	10	8
M	5.88	6.41	7.40	8.25
SD	3.10	3.05	3.26	2.49

TABLE 20

Analysis of Variance for Identity Status
According to Year in College

Source	df	MS	F
Between years	3	16.13	
			1.66
Within years	82	9.77	
			NS
Total	85		

TABLE 21

Differences in EI-ISB Scores, Identity Status,
and F_I Scores According to Year in College

Groups compared	N	M	t
EI-ISB scores			
Freshmen plus Sophomores	68	45.79	
vs.			1.15
Juniors plus Seniors	18	47.61	
Identity Status			
Freshmen	41	5.88	
vs.			2.00**
Seniors	8	8.25	
Freshmen plus Sophomores	68	6.09	
vs.			2.05***
Juniors plus Seniors	18	7.78	
F_I scores			
Freshmen	41	41.22	
vs.			1.57*
Sophomores	27	37.33	
Freshmen	41	41.22	
vs.			1.48*
Juniors	10	35.80	
Freshmen	41	41.22	
vs.			
Seniors	8	40.13	

*p < .20   NS
**p < .10
***p < .05

95

The possibility of a change in F_I (authoritarian)

scores over the four college years was checked by an analysis

of variance. Data for this analysis are found in Table 22.

A non-significant F of 1.30 (df=3/82) was obtained. (Table

23) Differences between various classes were investigated

by the third set of t tests found in Table 21. While there

seems to be an interesting trend for F_I scores to decrease

until the Senior year, none of the t's is significant.

TABLE 22

F_I Scores for Ss' Year in College

	Year in college			
	Freshman	Sophomore	Junior	Senior
N	41	27	10	8
M	41.22	37.33	35.80	40.13
SD	10.26	9.23	9.75	7.80

TABLE 23

Analysis of Variance for F_I Scores
According to Year in College

Source	df	MS	F
Between years	3	127.82	1.30
Within years	82	98.19	
Total	85		NS

<u>Authoritarian submission and conventionality</u> (F_I)

The hypothesis involving F_I scores centered mainly on the prediction that <u>S</u>s in the Foreclosure Status would obtain significantly higher F_I scores than would <u>S</u>s in the other Statuses. The means and standard deviations for these data are found in Table 24. An analysis of variance is contained in Table 25. An F significant at $p < .01$ (df=3/82) suggests significant differences in F_I according to Identity Status.

TABLE 24

F_I Scores for Identity Statuses

	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff.
<u>N</u>	18	24	23	21
<u>M</u>	34.28	45.17	37.57	38.67
<u>SD</u>	8.99	9.01	8.05	10.19

TABLE 25

Analysis of Variance for F_I Scores
According to Identity Status

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Statuses	3	452.56	
			5.24
Within Statuses	82	86.31	
			p= $< .01$
Total	85		

In order to test the hypothesis that Foreclosure Status Ss would obtain higher F_I scores than other Ss, several t tests were computed. These are found in Table 26. Confirmation of the hypothesis lies in the finding that Foreclosure Status Ss received significantly higher F_I scores than both Identity Achievement Ss and all Ss combined. No other groups differed significantly.

TABLE 26

Differences in F_I According to Identity Status

Groups compared	N	M	t
Identity Achievement	18	34.28	
vs.			3.88*
Foreclosure	24	45.17	
Identity Achievement plus Moratorium plus Identity Diffusion	62	36.98	
vs.			3.75*
Foreclosure	24	45.17	
Identity Achievement	18	34.28	
vs.			.44
Identity Diffusion	21	38.67	
Identity Achievement	18	34.28	
vs.			1.20
Moratorium	23	37.57	

*p < .001

A correlation was run between EI-ISB scores and initial F scores. An r=.04 (NS, df=84) indicated no linear relationship between these two variables (nor did inspection of a scatterplot indicate a curvilinear one). In addition, a

non-significant r of .12 (df=84) was obtained between F_I scores and overall CAT performance scores.

Change in self-esteem scores

One of the two main hypotheses of the study concerned the relationship between the achievement of ego identity and the extent to which a S was susceptible to an "invalidated self-definition." The measure of this susceptibility was to be overall (i.e., non-algebraic) change in self-esteem score from the first to the second administration of the test. However, we have already seen that no significant changes followed the ISD, regardless of whether the ISD was positive or negative, and regardless of S's Identity Status. In view of this, the following array of non-significant findings should not be too surprising.

In order to determine the relationship between EI-ISB scores and change in self-esteem, a correlation was computed between these two variables. The obtained r=.001 (NS, df=84) indicates no relationship between the two, and the hypothesis is not confirmed.

Data concerning differences in self-esteem change scores according to Identity Status are contained in Table 27. An F=.96 (NS, df=3/82) did not reach significance. A correlation between Identity Status and SEQ change score

yielded a low negative $r=-.19$ ($p < .05$, $df=84$). However, this is the only positive finding for either EI-ISB or Identity Status with respect to change in SEQ. Thus, there seems to be extremely little relationship between change in self-esteem following positive and negative ISD and either ego identity or Identity Status.

TABLE 27

SEQ Change Scores According to Identity Status

	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff.
N	18	24	23	21
M	4.78	4.83	5.04	6.67
SD	3.49	4.13	4.15	4.49

TABLE 28

Analysis of Variance of Change in
Self-esteem Scores for Identity Statuses

Source	df	MS	F
Between Statuses	3	16.94	.96
Within Statuses	82	17.66	
Total	85		NS

An analysis of variance of the data in Table 29, contained in Table 30, was performed to investigate the possible differential effects of positive or negative ISD on self-esteem changes for given Statuses. In other words, even though no overall change in self-esteem occurred, there remained the possibility that some Statuses might be more affected by positive than by negative ISD. However, none of the F's in the above analysis reached significance.

TABLE 29

Differences in SEQ Change Scores Following either
Positive or Negative ISD According to Identity Status*

	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff.
Positive ISD				
$\underline{N}$	9	12	11	11
$\underline{M}$	21.00	19.50	17.55	23.45
$\underline{SD}$	4.27	7.36	6.11	6.81
Negative ISD				
$\underline{N}$	9	12	12	10
$\underline{M}$	23.44	16.67	18.58	19.00
$\underline{SD}$	5.61	5.65	6.33	8.39

*Constant of 20.00 added to each $\underline{S}$'s average change score
in order to eliminate negative numbers.

TABLE 30

Analysis of Variance* of Change in Self-esteem
for Identity Status Negative or Positive ISD

Source	df	MS	F
Invalidated self-definition	1	1.82	.44
Identity Status	3	9.20	2.25
Interaction	3	5.20	1.27
Error	78	4.10	
			NS

*Two-way analysis of variance for unequal frequencies in
sub-classes.
(Walker and Lev, 1953, pp. 381-382)

Investigation of differences between sub-groups (Table

31) revealed only one significant difference. This was

between Identity Achievement and Foreclosure Ss who were

given negative ISD (t=2.60, p < .02, df=19). It appears

that Foreclosure Ss given negative ISD show a greater

decrease in self-esteem than do Identity Achievement Ss

under similar conditions.

Reactions to invalidated self-definition (ISD)

The Ss' reactions to the E's invalidation of their

alleged self-definition were tape-recorded. Ss were asked

to account for either the positive or negative discrepancy

between their self-estimates and E's interpretation of

TABLE 31

Differences in SEQ Change Score Following
Positive or Negative ISD According to Identity Status

Groups compared	$\underline{N}$	$\underline{M}$	$\underline{t}$
Identity Achievement - negative ISD	9	23.44	
vs.			1.38*
Foreclosure - positive ISD	12	19.50	
Foreclosure - positive ISD	12	19.50	
vs.			1.40*
Identity Diffusion - positive ISD	11	23.45	
Identity Achievement - negative ISD	10	23.44	
vs.			2.60***
Foreclosure - negative ISD	12	16.67	
Identity Achievement plus Moratorium plus Identity Diffusion - negative ISD	33	20.13	
vs.			1.43*
Foreclosure - negative ISD	12	16.67	
Identity Achievement - negative ISD	9	23.44	
vs.			2.02**
Moratorium - positive ISD	11	17.55	

*$p < .20$
**$p < .10$
***$p < .02$

"the data." The three types of reactions that occurred

with any significant frequency were: 1. negative inter-

pretation of positive information; 2. practically complete

acceptance of $\underline{E}$'s information; and 3. protestations of

modesty.

In the case of "negative interpretation," a S, told that he was more mature than he had estimated himself to be, and more mature than other Ss, reacted by saying that he had an "inferiority complex" or "sold himself short" or "didn't know himself well," etc. Rather than being pleased by the positive information, these Ss seemed somewhat dismayed.

"Complete acceptance" involved the S's supplying additional evidence for the E's negative information. This tendency on S's part to supply validating information did not seem to extend to those Ss receiving positive information. The furthest they went was to declare their modesty. However, "complete acceptance" Ss, told they were not as self-confident as they thought they were, or as other Ss were, agreed and related instances from their own lives to support this.

The final category was "modesty." In response to the E's positive information, a S might say that he tended to be "modest" or "didn't like to build himself up too much" or thought it a better interpersonal technique to "play it safe," etc. As opposed to the negative interpretation group, the modest group was clearly pleased with the information.

Distribution of these reactions across Identity Statuses is shown in Table 32. It is surprising to note that these categories encompass only 34 of the 86 $\underline{S}$s. However, other Ss had either unique reactions and couldn't be grouped, or, as was more often the case, had no distinctive reactions at all.

Inspection of Table 32 suggests that the sole difference of possible significance lies in the "complete acceptance" category, where a binomial test (Siegel, 1956, pp. 36-42), based on combining Identity Achievement with Foreclosure and Moratorium with Identity Diffusion, yields $p < .09$. This suggests a limited tendency for low Identity Status $\underline{S}$s to accept ISD more than high Identity Status $\underline{S}$s.

TABLE 32

Reactions to ISD Across Identity Statuses

	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff
Negative Interpretation	5	4	6	3
Complete* Acceptance	0	2	3	4
Modesty	1	2	2	2

*Combining Identity Achievement with Foreclosure and Moratorium with Identity Diffusion, binomial test yields $p < .09$.

While the above finding does not reach an acceptable level of significance, it corresponds with another interesting, yet non-significant, finding. Table 33 presents the per cent of S̲s in each Identity Status who change self-esteem scores in the direction of the particular type of ISD they were given. The table answers the question: What percentage of S̲s in any Status showed a positive SEQ change score when given positive information, and what percentage went down in self-esteem having been given negative ISD? These data indicate that a higher percentage of Identity Diffusion S̲s change consistently with ISD than Identity Achievement S̲s. However, a test of the significance of this difference yields a non-significant t of 1.13.

TABLE 33

Percentage of Ss in Each Identity Status
Changing SEQ Scores in Direction Consistent with ISD

	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff.
Positive ISD	56%	36%	40%	73%
Negative ISD	22%	75%	60%	50%
Total percentage changing in ISD - consistent direction	39%	54%	44%	57%

Another method of analyzing the taped reactions to ISD was to rate each tape on a five point scale according to the extent to which the S seemed to accept the information. If the S appeared to accept completely both the maturity and self-confidence statements, he was given a 5; if he accepted both statements, but less enthusiastically, he was given a 4; if he accepted one, but rejected the other, he received a 3; if he seemed to reject both, he was rated a 2; and if he completely rejected both, he was given a 1. The reliability coefficient between the E and another judge for 30 of these ratings was r=.83 (p <.0005, df=28).

Table 34 shows the extent of Ss' acceptance of ISD according to Identity Status and positive or negative ISD. By inspection, it is evident that few overall differences were obtained. Although Identity Diffusion Ss again showed a total higher degree of acceptance of ISD than other Statuses, the difference between them and Identity Achievement Ss was not significant (t=1.16, p <.20, df=37).

It might be expected that a relationship would exist between the extent to which Ss accepted ISD and the amount of change in SEQ scores. However, a correlation computed on this data yielded r=.03 (NS, df=84).

TABLE 34

Extent of S's Acceptance of ISD According to
Type of ISD and Identity Status

		Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff.	Total
Positive ISD					
N	9	12	11	11	43
M	4.00	3.83	3.82	3.91	3.88
SD	1.05	1.46	1.08	1.00	1.271
Negative ISD					
N	9	12	12	10	43
M	2.78	3.75	3.58	3.80	3.51
SD	1.40	.92	1.66	1.17	3.51
Total					
N	18	24	23	21	
M	3.39	3.79	3.70	3.86	
SD	1.38	1.22	1.54	1.08	

With the preceding information concerning Ss' reactions
to ISD, we are in a somewhat better position to deal with
the question concerning the failure of ISD to produce changes
in SEQ scores. The fact that Ss can be ranked reliably on
a five-point scale with respect to their apparent acceptance
of ISD, and the additional finding (see Table 35) that
significantly more Ss exhibit high as opposed to low

acceptance of the information (x^2=22.60, p<.001, df=4) provides evidence for the effectiveness of ISD. The problem would then seem to rest with the use of SEQ difference scores and/or the method of obtaining them.

TABLE 35

Number of Ss in Each Rank of
Extent of Acceptance of ISD

	Acceptance Rating					
	1	2	3	4	5	
Number of Ss	4	13	19	19	31	
$x^2$22.6047						
p <.001						

Performance in the Concept Attainment Task (CAT)

The second main hypothesis of the study concerned the relationship between ego identity, Identity Status, and performance on a conceptual task administered under the stressful conditions of evaluation apprehension and over-solicitousness.

EI-ISB scores. The relationship between EI-ISB scores and CAT scores was investigated via correlational methods, the results of which are found in Table 36. Inspection of these data reveals all correlations non-significant, but in the expected direction.

TABLE 36

Relationship between EI-ISB Scores and CAT Scores

Measures correlated	r	p	N
EI-ISB and CAT time scores	-.17	NS	84
EI-ISB and CAT requests and guesses score	-.12	NS	84
EI-ISB and CAT overall score	-.14	NS	84

In view of the significant findings relating SEQ_I and EI-ISB, a correlation was run between SEQ_I and overall CAT performance scores. This yielded a non-significant $r=-.027$ (df=84), indicating no relationship between the two variables.

Identity Status. Analysis of data concerning the relationship between Identity Status and CAT performance was complicated somewhat by heterogeneity of variance for all three analyses; time, requests plus guesses, and overall score. In view of this, as noted earlier, t tests were computed using variances of the groups compared.

Data for amount of time taken by each Identity Status is recorded in the first section of Table 37. Analysis of variance for these data is presented in Table 38. A significant F of 3.11 ($p < .05$, df=3/80) indicates that the Identity

Statuses differ in the amount of time taken on CAT prob-

lems.

TABLE 37

Performance on CAT Variables
According to Identity Status

	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff.
CAT time				
$\underline{N}$	18	23	22	21
$\underline{M}$	18.17	34.20	24.50	29.73
$\underline{SD}$	7.94	13.84	15.77	18.52
CAT requests plus guesses				
$\underline{N}$	18	23	22	21
$\underline{M}$	599.17	875.82	807.14	767.38
$\underline{SD}$	186.63	285.44	495.58	266.43
CAT overall score				
$\underline{N}$	18	23	22	21
$\underline{M}$	791.94	1147.83	1024.82	1078.57
$\underline{SD}$	244.15	407.98	612.04	352.38

Overall CAT performance scores for the four Identity

Statuses are found in the third section of Table 37. When

these data were subjected to analysis of variance (Table 40)

a non-significant F of 2.28 (df=3/80) was obtained. This,

again, suggests little apparent difference between Identity

Statuses in their overall CAT performance.

TABLE 40

Analysis of Variance for Overall CAT
Performance Scores According to Identity Status

Source	df	MS	F
Between statuses	3	448648	2.28
Within statuses	80	196881	
Total	83		NS

However, when investigating differences in CAT per-

formance between different Statuses by means of t tests, it

was found that for all three analyses of CAT performance,

Identity Achievement $\underline{S}$s do significantly better than Iden-

tity Diffusion Ss (p's ranging from $<$.01 to $<$.05). Identity

Achievement $\underline{S}$s also perform significantly better than the

other three Statuses combined (p's ranging from $<$.02 to $<$.05).

These data, found in Table 41, are consistent with the

second main hypothesis of the study.

TABLE 38

Analysis of Variance for CAT _time_ Scores
According to Identity Status

Source	df	MS	F
Between statuses	3	961.90	
			3.11
Within statuses	80	309.24	
			p=< .05
Total	83		

The total points for _requests plus guesses_ is contained
in the second part of Table 37. Analysis of variance of
these data (Table 39) yields F=1.86 (NS, df=3/80), indi-
cating no effect of Identity Status on CAT performance as
reflected in the guesses plus requests score.

TABLE 39

Analysis of Variance for CAT Requests
Plus Guesses Score According to Identity Status

Source	df	MS	F
Between statuses	3	218182.83	
			1.86
Within statuses	80	117431.98	
Total	83		
			NS

TABLE 41

Differences between Identity Statuses
in CAT Performance

Groups compared	N	M	t
Time			
Identity Achievement	18	18.17	
vs.			2.39*
Identity Diffusion	21	29.73	
Identity Achievement	18	18.17	
vs.			2.41**
Foreclosure plus Moratorium plus Identity Diffusion	66	29.55	
Foreclosure	23	34.20	
vs.			2.90***
Identity Achievement	18	18.17	
Foreclosure	23	34.20	
vs.			2.24*
Identity Achievement plus Moratorium plus Identity Diffusion	61	24.43	
Requests plus guesses			
Identity Achievement	18	599.17	
vs.			2.189*
Identity Diffusion	21	767.38	
Identity Achievement	18	599.17	
vs.			2.28*
Foreclosure plus Moratorium plus Identity Diffusion	66	805.15	

*$p < .05$
**$p < .02$
***$p < .01$

TABLE 41 (continued)

Differences between Identity Statuses
in CAT Performance

Groups compared	$\underline{N}$	$\underline{\bar{M}}$	$\underline{t}$
Requests plus guesses (continued)			
Foreclosure	23	875.82	
vs.			3.47*****
Identity Achievement	18	599.17	
Foreclosure	23	875.82	
vs.			1.69**
Identity Achievement plus Moratorium plus Identity Diffusion	61	732.08	
Overall Score			
Identity Achievement	18	791.94	
vs.			2.83*****
Identity Diffusion	21	1078.57	
Identity Achievement	18	791.94	
vs.			2.45****
Foreclosure plus Moratorium plus Identity Diffusion	66	1078.95	
Foreclosure	23	1147.83	
vs.			3.19*****
Identity Achievement	18	791.94	
Foreclosure	23	1147.83	
vs.			1.63*
Identity Achievement plus Moratorium plus Identity Diffusion	61	968.30	

*$p < .20$
**$p < .10$ $\underline{NS}$
***$p < .05$
****$p < .02$
*****$p < .01$

Supplementary findings. Since Ss were permitted to
give up on a CAT problem if they wished, it was possible
to calculate total number of "give-ups" per Identity Status.
These data are contained in Table 42. When comparing
Identity Achievement Ss with other individual Statuses
separately, Chi-square equals 7.00, p $<$ .10. However, when
comparing Identity Achievement Ss with other Ss as a group,
X^2=17.19, and is significant at p $<$ .001. These Chi-squares
are based on number of individuals per Status who obtained
one or more give-ups, rather than on total number of give-
ups per Status, as the latter method would inflate the N.

TABLE 42

Number of Ss in Each Identity Status
Having One or More "give-ups" on CAT

	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff.
	1	9	4	7

X^2=7.0000
p $<$ .10

* *

	Ident. Ach.	All other statuses
	1	20

X^2=17.1904
p $<$ .001

Another interesting supplementary finding is that the Moratorium Status is significantly more variable in overall CAT score than the other three Statuses combined ($F_{max}=2.62$, $p^7 < .05$, df=21/61). (McNemar, 1955, pp. 244-247) This greater variability in performance is consistent with the theoretical definition of the Moratorium Status.

In view of the hypothesis that low SEQ change scores and low CAT performance scores are both indicators of achievement of ego identity, one would expect them to correlate significantly. The obtained correlation was $r=.20$ ($p < .05$, df=82). This positive finding indicates at least some relationship between the two factors.

Level of aspiration measures

Level of aspiration measures were obtained on the CAT by asking the S to estimate the amount of time it would take him to solve the next problem having been given his time on the previous problem. The measures obtained from this procedure were: the initial estimate; attainment discrepancy (D) score; total number of shifts in estimate; and unusual shifts in estimate.

Although no hypothesis was made concerning initial estimate (i.e., S's estimate of time he would take to solve the first problem, having been told that it took most people

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[7] one-tailed test

3 minutes), one might expect Identity Achievement $\underline{S}$s would

be somewhat more optimistic in their estimate than other $\underline{S}$s.

This was not found to be the case. Data concerning the

relationship between Identity Status and initial estimates

are found in Table 43. Analysis of variance of these data

is contained in Table 44. This analysis yields a non-

significant F of .40 (df=3/80), indicating no overall

difference in initial estimate according to Identity Status.

A t test between the two most discrepant Statuses, Identity

Achievement and Moratorium, yielded t=.83 ($\underline{NS}$, df=37).

TABLE 43

Initial Estimate in CAT
According to Identity Status

	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff.
$\underline{N}$	18	23	22	21
$\underline{M}$	3.12	3.10	3.02	3.06
$\underline{SD}$	.30	.19	.41	.36

118

TABLE 44

Analysis of Variance for Initial Estimates
in CAT According to Identity Status

Source	df	MS	F
Between statuses	3	.05	.40
Within statuses	80	.11	
Total	83		NS

The next LOA measure investigated was attainment

discrepancy or D score. This was obtained by comparing

a S's stated expectancy with his actual performance; i.e.,

by subtracting his stated time estimate from his actual

solution time immediately preceding. Hence, an overall

positive D score means that the S tends to set his level of

aspiration higher than his attainment; a negative D score

means the opposite.

Data on D scores according to Identity Status are

presented in Table 45. Inspection of original data revealed

that no Status obtained a negative average D score, the

range being from .60 for Identity Achievement to 2.06 for

Foreclosure. The analysis of variance for D scores across

Identity Statuses is found in Table 46. An F significant

at $p < .01$ was obtained from this analysis (F=5.10, df=3/80).

TABLE 45

D Scores* on CAT According to Identity Status

	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident.Diff.
N	18	23	22	21
M	3.60	5.06	4.11	3.91
SD	.80	1.65	.72	1.49

*Constant of 3.00 added to each S's D score to eliminate negative number.

TABLE 46

Analysis of Variance for D Scores
According to Identity Status

Source	df	MS	F
Between statuses	3	8.43	5.10
Within statuses	80	1.65	p < .01
Total	83		

When t tests were applied to the data (Table 47) it was found that Ss in the Foreclosure Status had significantly higher D scores than those in Identity Achievement Status (t=3.35, p< .001, df=82). One may conclude from this that Foreclosure Ss do not seem to respond to failure in the generally accepted realistic manner of revising their goals

downward. They tend to maintain high goals in spite of failure. No other differences reached an acceptable level of significance, although there seemed to be a tendency toward over-estimation among Moratorium Ss also.

TABLE 47

Differences in D Score between Identity Statuses

Groups compared	N	M	t
Foreclosure	24	5.06	
vs.			3.35**
Identity Achievement	18	3.60	
Foreclosure	24	5.06	
vs.			3.70***
Identity Achievement plus Moratorium plus Identity Diffusion	62	3.90	
Identity Achievement	18	3.60	
vs.			1.90*
Moratorium	22	4.11	
Identity Achievement	18	3.60	
vs.			.567
Foreclosure plus Moratorium plus Identity Diffusion	66	4.38	

*p $<$.10
**p $<$.01
***p $<$.001

Total number of shifts in estimate was computed and the mean number of shifts per S was found to be 4.14 out of a possible 6. Ss were dichotomized above and below 4.00

into High and Low groups, so that each $\underline{S}$, except those with

exactly 4 shifts, was categorized into either a High or a

Low group. This was analyzed by means of chi-square[8] and

is found in Table 48. The obtained chi-square of .56 (df=3)

was not significant. There seems to be no relationship

between shifting estimates and Identity Status.

TABLE 48

High and Low Shifters According to Identity Status

Group	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident.Diff.
High	8	12	9	10
Low	5	8	9	7
x^2 .5598				
NS				

The final LOA measure was the frequency of unusual

shifts in estimate. These were divided initially into two

classes: $\underline{major}$ unusual shifts which involved the $\underline{S}$'s

shifting his estimate up after failure or down after success;

and $\underline{minor}$ unusual shifts which involved the $\underline{S}$'s refusal to

change estimate following success or failure. A summary

of the data on unusual shifts is presented in Table 49.

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[8]Since there is some question as to whether or not "shift-
ing" determined by counting number of shifts per $\underline{S}$, is a
continuous variable, a non-parametric test was used here.

TABLE 49

Unusual Shifts According to Identity Status

Category	Identity Status			
	Ident.Ach.	Fore.	Mora.	Ident.Diff.
Major:				
Up after failure	3	2	3	2
Down after failure	3	2	0	0
Minor:				
Same after failure	21	27	29	24
Same after success	12	12	15	16

Total same after failure   Total same after success

     101   55

x^2 13.56

$p < .001$

A surprisingly low number of major unusual shifts (15) occurred, especially taking into account the fact that $\underline{S}$s had a total of 504 opportunities for such shifts. Among minor shifts, there is a preponderance of $\underline{S}$s who maintain their same estimates in the face of failure ($x^2 = 13.45$, $p < .001$, df=1). This is consistent with a pattern of high need for achievement which one might expect of college students.

The mean number of unusual shifts (major plus minor) per $\underline{S}$ was 2.04. $\underline{S}$s were dichotomized above and below 2.00 into two groups representing High and Low shifting. The data were then analyzed by means of chi-square for differences in frequency of unusual shifting according to Identity Status. These data are presented in Table 50. A nonsignificant chi-square of 1.66 (df=3) indicates that unusual shifts are not associated with any particular Identity Status.

TABLE 50

High and Low Unusual Shifters
According to Identity Status

Group	Identity Status			
	Ident. Ach.	Fore.	Mora.	Ident. Diff.
High	7	7	11	7
Low	7	9	7	10
x^2 1.6561				
NS				

In order to compare EI-ISB with the various LOA measures, $\underline{S}$s were split into High and Low groups at the median EI-ISB score of 46.5. Table 51 shows these comparisons, none of which reaches significance. It appears that EI-ISB scores bear a negligible, if any, relationship to LOA measures.

TABLE 51

Comparison of High and Low EI-ISB Scores
with LOA measures

Variables	EI-ISB	
	High	Low
D scores		
$\underline{N}$	42	44
$\underline{M}$	4.17	4.14
$\underline{SD}$	2.74	1.62
* *		
Frequency of shifts		
High	18	19
Low	14	15
x^2 .0007		
$\underline{NS}$		
* *		
Major unusual shifts	8	11
x^2 .48		
$\underline{NS}$		
* *		
Combined unusual shifts	81	94
x^2 .97		
$\underline{NS}$		

CHAPTER V

DISCUSSION

This chapter will elaborate on some of the findings
reported in the previous chapter. It is divided into two
parts. The first deals with the experimental findings,
per se; the second considers some implications of the
findings in terms of both the present and future studies.

Experimental Findings

Relationship between EI-ISB and Identity Status

The hypothesis of a significant positive relationship
between these two measures was confirmed. Although the
study was not specifically designed in such a way as to test
the theoretical difference between the two (i.e., EI-ISB
as a more broad-guage measure of ego identity than the more
narrowly conceived "styles of life" constituting Identity
Statuses), the moderate value of the correlation at least
suggests that the two variables are not completely overlap-
ping ones.

125

Initial self-esteem

It was predicted that both EI-ISB scores and Identity Status would be positively related to self-esteem scores. While this was found to be the case to a limited, but significant, extent for EI-ISB, it was not confirmed for Identity Status. In fact, one finds the greatest (albeit, non-significant) difference on this variable between Moratorium and Identity Diffusion, rather than in the expected Identity Achievement - Identity Diffusion discrepancy.

No specific theoretical rationale will be advanced as to why the above results were achieved. One might speculate that Moratorium Ss tend to respond more defensively to the SEQ and, hence, receive inflated scores. However, there is no support for this in the criteria on which the Moratorium Status is based.

Year in college

The hypothesized relationship between both EI-ISB scores and Identity Status and year in college was found for only one of the variables, Identity Status. There seemed to be no significant increment to EI-ISB scores with advancing year in college, although underclassmen do receive non-significantly lower average EI-ISB scores than do upperclassmen.

The hypothesis concerning Identity Status increase
with increase in year in college received support, although
not at a high level of significance.

F_I scale

Foreclosure Status $\underline{S}$s received significantly higher F_I
scores than either Identity Achievement $\underline{S}$s or other $\underline{S}$s
combined. This finding constitutes confirmation of the
hypothesis and contributes a valuable empirical referent
for the Foreclosure Status.

Change in self-esteem

It was hypothesized that $\underline{S}$s high in Identity Status
and Ss who received high EI-ISB scores would show the least
change in self-esteem following ISD. No confirmation of
this was obtained for either EI-ISB scores or for Identity
Statuses treated as separate groups. Extremely limited
support for the hypothesis was found in a low correlation
between Identity Status treated as a continuum and change
in SEQ scores.

A possible reason (the two-month span between SEQ_1
and SEQ_2) for the failure of confirmation of this hypothesis
will be discussed later in this chapter. Until this pos-
sibility is investigated, it would probably be best to

reserve judgment on the fate of the hypothesis, at least in terms of extending it beyond the present study.

An additional finding was that among the Statuses, Foreclosure Ss seem to show a greater decrease in self-esteem when given negative information about themselves than do Identity Achievement Ss under the same conditions.

Reactions to invalidated self-definition

There were somewhat fewer distinctive reactions among the Statuses to ISD than were expected. However, considering those which did occur, the following characteristics were noted. There was a slight tendency for low Identity Status Ss (Moratorium and Identity Diffusion) to fall into the "complete acceptance" category of reactions to negative ISD than for high Identity Status Ss (Identity Achievement and Foreclosure). This corresponds with the similarly limited tendency for a higher percentage of Identity Diffusion Ss as opposed to Identity Achievement Ss to change self-esteem in a direction consistent with ISD.

The general reaction among all Ss to ISD was one of acceptance, with somewhat greater acceptance by low than by high Identity Status Ss.

Concept Attainment Task performance

It was hypothesized that both EI-ISB and Identity Status would be related to the three performance measures taken from the CAT: time, requests plus guesses, and overall score.

All correlations between EI-ISB and measures of CAT performance were in the expected direction; all were non-significant. A tendency for Ss high in ego identity to do well on the CAT seems to exist, but not to such an extent as to constitute confirmation of the hypothesis.

The relationship between Identity Status and CAT performance, particularly in terms of differences between Identity Achievement Ss and Ss from other Statuses, is less equivocal. Identity Achievement Ss showed significantly better performance on all three measures than either Iden-tity Diffusion Ss or the three other Statuses combined. A possible contaminating factor, intelligence, was ruled out because of its failure to relate to Identity Status.

It is of some import that Ss placed in a particular category on the basis of such molar criteria as crisis and commitment in the areas of occupation and ideology should show such significant differences in behavior on a seemingly far-removed experimental task. It is also interesting to

note that one of the reasons for adding a stress factor to the CAT was to facilitate discrimination between Identity Achievement and Foreclosure Statuses. Foreclosure $\underline{S}$s, in general, performed significantly more poorly than Identity Achievement $\underline{S}$s and somewhat more poorly than all other Statuses combined. An additional finding supporting this 'is that Identity Achievement $\underline{S}$s give up on CAT problems significantly less frequently than do $\underline{S}$s in other Statuses - once again indicating superiority of Identity Achievement's CAT performance.

Moratorium $\underline{S}$s were found to be significantly more variable in CAT performance than other $\underline{S}$s. This points up what seems to be a distinguishing feature of this Status - its tendency to vary between positive and negative attributes according to the particular variable under study. In connection with this, it might be noted that at one time during the data analysis, Moratorium $\underline{S}$s were dispersed into the other Statuses into which they seemed to fit best. This was done merely to see what the data would look like. Several more significant findings than were obtained by the present method were noted. However, this did not constitute in any way a major part of the data analysis and is neither experimentally nor theoretically justifiable. It is

mentioned here only to contribute more information as to
the extreme variability within the Moratorium Status.

To the extent that both CAT performance and change in
SEQ reflect the degree of identity achievement, one would
expect them to be correlated. This was found to be the
case to a limited, but significant, extent.

Level of aspiration measures

The original hypothesis predicted a negative relation-
ship between high Identity Status and LOA measures associated
with unrealistic goal-setting. While this hypothesis,
per se, was not confirmed, it was found that Foreclosure
Status Ss achieved significantly higher D scores than both
Identity Achievement Ss and Ss in all Statuses combined.
This reflects a tendency on the part of Foreclosure Ss to
overestimate their performance even though they received
continual feedback of their attainment, and suggests a
degree of defensiveness and rigidity in their goal-setting
behavior.

The second LOA variable related to unrealistic goal-
setting was the number of unusual shifts. This variable
did not discriminate among either Identity Statuses or
EI-ISB scores. Other LOA measures such as initial estimate
and number of shifts in estimate bore no relationship to

Identity Status. There may have been several reasons for
the lack of relationship between these latter LOA measures
and Identity Status or ego identity. The simplest is that
the CAT provided only 6 opportunities for shifts and only
7 for estimates, perhaps not enough to get a clear picture
of an expectancy pattern using this particular measure.
Another possibility is that this LOA measure on this
conceptual task just does not reflect differences in
Identity Status.

Treatment conditions

ISD and SEQ change. It is somewhat puzzling to be
confronted with the obvious ineffectiveness of the ISD -
change in self-esteem condition. The SEQ itself seems to
have well-established validity, both in terms of the
Rosenbaum studies (1960a, 1960b, 1961) and in terms of
its relationship with the EI-ISB in the present study. On
the other hand, Ss were also reliably observed to have been
affected by the ISD treatment - so that the difficulty
apparently does not lie with this factor either. Moreover,
the general paradigm of susceptibility to external sources
of self-definition has been used previously and found
successful in the Gruen study (1960). Since neither the
measure nor treatment condition nor the two in concert seem

to be at fault, the conclusion is that one might look into

the particular method of procedure that this study

employed.

The most salient factor seems to be the length of

time - in most cases, two months - between the first and

second administration of the SEQ. It is quite possible

that variability due to $\underline{S}$s' changes in self-esteem over this

period of time obscured differences due to the treatment

alone. The non-significant, but directionally appropriate,

relationships between Identity Status and SEQ change would

lend some tentative support to this possibility.

Fortunately, if this is the case, the situation can

be easily remedied. The first step would be to construct

an alternate form, preferably split-half, of the SEQ and

obtain a high test-retest reliability coefficient for the

two forms over a period of, say, two weeks. This having

been done, $\underline{S}$s would then take form I of the SEQ within two

weeks prior to the ISD treatment; immediately following ISD,

they would be given form II and the difference score between

these two would be used as a measure of self-esteem change.

Another possibility that might account for the insig-

nificant results of the ISD treatment deals with the

particular form in which the ISD was presented to $\underline{S}$s. It

was worded in such a way that it might have aroused dual cognitions. One was the intended idea that the S was better (or worse) than he had estimated himself to be and better (or worse) than other Ss. The other was that the S simply had an inaccurate self-image, a less threatening possibility than lack of maturity and self-confidence, and, hence, less crucial in effects on self-esteem.

One of the categories used in analyzing the taped reactions to ISD was a S's "focus on discrepancy." This applied to Ss who exhibited just the reaction tendency described above; they dealt, not with the consequences of possible immaturity and low self-confidence, but with their faulty estimations of themselves. However, only 3 of the 86 Ss appeared to fall into this category. In addition, if this were an adequate explanation, all Ss would, in effect, be receiving negative information. That is, they would perceive being told that their self-concepts were inaccurate. To the extent that this has any consequences for self-esteem and was at all wide-spread among Ss, one would expect more negative self-esteem changes than positive ones. This was not the case. Thirty-eight Ss change positively in their SEQ scores, thirty-nine changed negatively, and eight showed no change.

The conclusion, then, is that although the possibility of the S̲s receiving two types of information and focussing on the less threatening one still exists, the available evidence does not support it. It would seem more fruitful at this time to pursue the elimination of test-retest variability suggested previously.

If positive results (i.e., more change for low ego identity S̲s than for high, and more change for Identity Diffuse S̲s than for Identity Achievement ones) were not obtained, then one could revise the ISD to a more straight-forward form. However, the value of the treatment in its present form lies in the opportunity it provides to elicit S̲s' reactions to the information.

In short, it appears that the "change in SEQ" hypothesis failed of confirmation due to a defect in experimental procedure, and that the hypothesis is still viable, though presently unsupported.

CAT under stress. The stress conditions of evaluation apprehension and over-solicitousness were generally effective in helping to discriminate CAT performances among Identity Statuses. Of course, by using two types of stress, one is not certain which of the types or, more likely, whether both are effective. The answer to this question was not crucial

to the present study; however, investigation of these two

conditions would be an interesting project in its own right.

Pilot study data, both empirical and anecdotal,

suggested that both types of stress were effective. This

is not too surprising in the case of evaluation apprehen-

sion; but if over-solicitousness is an equally effective

stressor, then this might have some interesting ramifi-

cations for research in psychotherapy.

Many clinicians are suspicious of that type of

supportive therapy called "ego-bolstering" aimed at grat-

ification of the patient's immediate needs for nurturance.

Erikson, in discussing the appropriateness of such tech-

niques, states:

> A weak ego does not gain substantial
> strength from being persistently
> bolstered. ....A war, however, can be
> an unfair test to ego strength. ....
> Ego bolstering is a legitimate measure
> in such days of collective danger.
> ....The indiscriminate application of
> the philosophy and the practice of
> "ego bolstering" to peacetime condi-
> tions, however, would be theoretically
> unsound, and therapeutically unwhole-
> some. (1946, p. 47)

Of course, there was no intent on the part of the task

E to "bolster" the S's flagging ego; the adjective over-

solicitousness specifies that. However, might it be the

case that persistent reassurance (support) in the face of

an anxiety-provoking situation, well within the S's capa-
bilities, actually produces a decrement in performance as
opposed to, say, very brief reassurance or no reassurance
at all?

This question could be approached by using the same
experimental procedure (CAT) as employed in the present
study, but with varying degrees of solicitousness.
Naturally, any indications for psychotherapy arising from
such a study would be suggestive only and would await
testing in a controlled therapeutic situation.

<div align="center">Implications of Findings</div>

Measures

EI-ISB. With respect to the main purpose of the study,
the development of measures of ego identity and assessment
of their validity in an experimental setting, one may say
that the task has been about half completed. There is
little question that reliable measures have been developed;
but, at least in the case of EI-ISB, the validity is
questionable.

As was expected, this test correlated significantly
with both Identity Status and SEQ. However, it seemed to
bear no significant relationship to such other important
variables as SEQ change scores, CAT performance, or year

in college - although for the latter, two results were in
the expected direction.

The failure of EI-ISB to predict to the major exper-
mental tasks brings its evaluation dangerously close to
little more than a test of "general maturity" or "adolescent
adjustment." Of course, EI-ISB would be expected to
correlate with such measures, but both the stems and their
criteria were chosen on a more subtle and theoretically
derived basis than what such a label would imply.

Necessary steps in refining this test are two-fold:
first, eliminating those two or three items still present
which seriously diminish reliability of scoring; and second,
running an item analysis, retaining those items which
correlate significantly with both Identity Status and
those experimental tasks (in this case, CAT performance)
with which Identity Status correlates.

There are two reasons for retaining the EI-ISB. The
first is that it is more convenient to administer and
score than the Identity Status Interview. The second is
that it seems to measure factors similar to, yet not
completely accounted for by the Identity Status Interview.
This may be seen in its correlation with SEQ, which did not
correlate with Identity Status, together with its signif-
icant correlation with Identity Status. It was originally

thought that this common factor was overall ego identity; however, in view of the test's failure to discriminate Ss' performance in either experimental situation, this claim is presently not justified.

Identity Status Interview. This seems to have been a situation in which a more clinically attuned measure paid off. Reliability coefficients were quite satisfactory, considering the difficulties entailed in such complex clinical judgments. Experimental findings indicate significant relationships between Identity Status and one of two major experimental variables, CAT performance - as well as initial F score, year in college, and LOA measures.

An important question concerning Identity Status was whether to consider the Statuses as a continuum with gradations based on the "adaptability to environmental press" variable, or to consider them as discrete groups. Although the data were not reported in the Results section, for no variable did ratings of High, Medium, or Low adaptability to press discriminate among Ss within Identity Statuses. Criteria for ascertaining this variable were not well spelled out nor were interviews so focussed as to provide a good estimate of it. These generally negative findings lead one to question the meaningfulness of the

points - identity "types." In line with the major approach

of this study, one can derive the following empirical

descriptions of each Status, based on experimental findings.

Identity Achievement. This group attains the highest

EI-ISB scores; it also tends to have more members in the

Junior and Senior classes in college. Identity Achieve-

ment Ss are somewhat less submissive to authority than

other Statuses, although not significantly so. Their self-

esteem seems a little less vulnerable to external manipu-

lation, particularly manipulation in the form of negative

communications, than does that of other Ss, although, again,

this tendency is not significant.

Identity Achievement Ss tend to perform significantly

better on a stressful concept attainment task than do Ss

in other Statuses, yet they are not significantly more

intelligent. They also tend to persevere on conceptual

problems, giving up significantly less frequently than

other Ss. They seem to hew fairly closely to their attain-

ment level when setting goals on a conceptual task, although

they do not seem to differ much from other Ss in tendencies

to shift levels of aspiration unexpectedly; e.g., down

after success.

Foreclosure. This Status' most outstanding character-

istic was its significantly higher endorsement of

"adaptability to press" factor except as a somewhat arti-
ficial means of stretching the concentration of four points
of Identity Status into a twelve-point scale.

In addition to this, many tables in the Results section
show the Foreclosure Status scoring less favorably than
Moratorium. This finding casts some doubt on the relative
positions assigned Foreclosure and Moratorium when converting
the Statuses into a continuum.

The weakness of the continuum approach is evident when
one considers that it is based on a non-discriminating
variable and there is no certainty of the relative position
of Statuses along the continuum.

Thus, while certain of the analyses were based on the
presumed continuous distribution of Statuses, the most
significant findings were obtained when each Status was
considered as a separate group with its own distinctive
characteristics. It appears that the interview criteria
were not sufficiently explicit and detailed to permit a
refined ordering in which each Status merges into it
neighboring Status, and in which they are continuously
ordered on a scale from high to low identity achievement.
Or, perhaps, identity theory is not explicit enough now to
accomplish more than the delineation of concentration

authoritarian submission and conventionality items on the
SEQ-F scale. Attributes such as obedience, strong leader-
ship, and respect for authority seem to be attractive to
these $\underline{S}$s. Foreclosure $\underline{S}$s' self-esteem seems particularly
vulnerable to externally-supplied negative information.
They also do significantly more poorly on a stressful con-
cept attainment task than do Identity Achievement $\underline{S}$s and
somewhat more poorly than other Statuses combined. More
Foreclosure Status $\underline{S}$s give up on CAT problems than do $\underline{S}$s
from other Statuses.

Almost as distinguishing a feature as the high F_I
score for this group is their rather unrealistic response
to failure on the CAT. Rather than moderating their high
goals, they tend to persist in maintaining them, even though
they remain unfulfilled. It is interesting to note that a
high D score, on which the above statement is based, is
one of the indicators of what Rotter (1954) refers to as
"low freedom of movement." Among the characteristics
associated with low freedom of movement is "the achievement
of superiority through identification." (Rotter, 1954,
pp. 196-197) This is consistent with both the theoretical
definition of the Foreclosure $\underline{S}$ as one who is becoming his
parents' alter ego, as well as the empirical findings

concerning the high value he places in authoritarian principles together with the shakiness of his self-esteem when presented with negative information about himself by an external prestigeful source.

Moratorium. The distinguishing features of the Moratorium Status are its variability and its resemblance to Identity Achievement. This group, at times, exceeds Identity Achievement in positive characteristics such as self-esteem. On the other hand, one finds it second only to Identity Diffusion on such variables as SEQ change score. This tendency toward variable performance among Moratorium Ss is best documented by Moratorium's significantly more variable performance on the CAT.

Resemblance to Identity Achievement is shown on several measures. Moratorium Ss obtain EI-ISB scores very close to ones obtained by Identity Achievement Ss, and, hence, higher than those obtained by the other two Statuses. They also most closely resemble Identity Achievement Ss in F_I scores. Their self-esteem seems to be somewhat less susceptible to increase after having been given positive information than that of other Statuses; in fact, one finds a very slightly greater tendency among Moratorium Ss to place a negative interpretation upon positive externally-provided information than other Ss show. On the whole,

tendency among the Statuses to change his self-esteem in a
direction consistent with an external source of self-
definition, particularly if that source supplies positive
information. In line with this, his apparent reactions to
ISD are more accepting than those of other $\underline{S}$s.

The CAT performance of the Identity Diffusion $\underline{S}$, while
not the lowest of the Statuses, is uniformly significantly
poorer than that of Identity Achievement. A positive
factor in the Identity Diffusion's predominantly negative
profile is his apparently realistically oriented reaction
to failure, which does not seem marked by the defensive
patterns one might expect. In general, he seems to keep
his level of aspiration fairly close to his level of attain-
ment.

These "profiles" of the Identity Statuses are drawn –
admittedly somewhat freely at times – from empirical
sources, and are intended to complement the more theoretical
descriptions found in the first section of this study and
in the Identity Status Interview Manual.

Future research

The next step in research on these Statuses could
profitably be filling out their empirical referents by
using a different set of experimental tasks and observing

they are quite close to Identity Achievement Ss in their
general reluctance to change self-esteem in the direction
of ISD. The CAT performance also more closely resembles
Identity Achievement than it does the other two Statuses.

In view of the earlier considerations, although never
taken too seriously, of dropping the Moratorium Status, one
may say that Moratorium Ss, while not exhibiting such
clearly distinguishing characteristics as other Statuses,
do behave discriminably differently, if only by virtue of
their variability, and their inclusion rounds out the
Identity Statuses. Also, it must be kept in mind that the
present study was designed to elicit behavior more charac-
teristic of other Statuses than Moratorium.

Identity Diffusion. The Identity Diffusion S truly
seems to be low man on the Status totem pole. He is the
anchor point for most high-low comparisons with Identity
Achievement. His EI-ISB scores are significantly lower
than all Statuses combined, and his self-esteem is somewhat
lower than others'. While he does not exhibit quite the
same proclivity for authoritarian values as the Foreclosure,
he is next highest among Statuses in their endorsement.

His self-esteem shows a greater extent of change when
compared with other Statuses and he exhibits the greatest

differentiating characteristics of performance among the
Statuses. Some tasks that might be amenable to this purpose,
mainly because of their strongly ideographic nature, are
responses to TAT pictures (Murray, 1938), role variability
assessed by means of the Role Construct Repertory Test
(Kelly, 1955), and a semantic differential technique (Osgood,
Suci, and Tannenbaum, 1957). Descriptions of Statuses by
means of responses to these tests would add new descriptive
dimensions as well as suggest hypotheses for further research.

Another possibility is the further discrimination of
Statuses by differential stress. That is, if the Statuses
are reliably distinguishable, then there ought to be types
of stress that would be more effective with one Status than
another. One such situation might be stimulus deprivation;
in a setting so devoid of environmental supports as this
is, one might expect Foreclosure Ss to show even more
disturbance than Identity Diffusions.

Following the filling in of the behavioral profiles
for each Status, perhaps the most exciting task in this
line of research could be begun: the specification of
antecedent conditions. In fact, the claim of the present
study to deal with "construct validity" is somewhat exag-
gerated. We are not dealing with S-R type relationships

here nearly to the extent that we are engaged in establishing R-R ones (Bergmann and Spence, 1944). We cannot consider "construct validity" to be established for either ego identity or the Identity Statuses until we can locate at least some of their antecedent conditions.

To accomplish this task, one would need to specify parent variables associated with each Identity Status, measure these variables, relate them to the EI-ISB and Identity Status Interviews, for which, in turn, we would have established some predictive validity. To elaborate and go beyond some of Erikson's (1963) suggestions, at least the following maternal variables would be important to explore:

Intrusiveness. This is a characteristic of the "auxiliary mom" who, when her child joins the Boy Scouts, becomes a Den Mother, when he joins the band, becomes a member of the Band Parents Association, and when he joins a fraternity, is active in the Mother's Club. She makes it nearly impossible for him to do anything completely on his own. There is a certain penetrating omnipresence about her.

Availability. Closely akin to intrusiveness is "availability." This is characteristic of the "mom-back-home." There are really few impelling reasons for a boy with such

a mother to relinquish infantile sources of gratification, for "mom" will always be available when needed, nurturance inexhaustible.

Social desirability (after Crowne and Marlowe, 1964). This mother with a high need for social approval tends to instill a "glad-to-be-proper" attitude in her son. He is taught to be unaware of his less acceptable feelings until he may begin to doubt what his "real" feelings are. For this mother, the important concern is not for what one does feel, but for what one ought to feel.

Dominance. This mother is the home arbiter. She has the final word on what clothes, what college, what vacation, what girl, etc. The boy with this type of mother need not trouble himself to establish an identity; his mother will provide a pre-fabricated one.

Among important paternal variables might be the following two:

Submission. This is the "dad" who lives in essentially two different realms. In one, "the office," he is a ruler; in the other, "home," he is merely one of the subjects. He is the complement to the "dominant" mom. It is not submission in general that is referred to here, but particularly submission to the wife in the home.

Inappropriate dependency. This might be referred to as the "sibling dad." His own needs for affection and nurturance make him a covert competitor with the son for the mother's favors. This may evolve into a "pal" relationship between father and son, making it difficult for the son to transcend the period of boyhood, since he is not presented with a model who has successfully made the transition.

The above descriptions tend to create the impression of uni-variable "types" of mothers and fathers. Of course, any parent might show any of these characteristics to a greater or lesser extent. The preceding "types" have been constructed solely to illustrate the variables.

Especially so long as one is dealing with college students, there would seem to be little reason why a structured interview could not be constructed to tap these parent variables, interviewing the students' parents in their own homes.

One further point that has not been mentioned since a somewhat cursory reference in the Background section is that all the existing psychosocial criteria for ego identity apply primarily to males in our society, and perhaps to a somewhat selective sample of them. Future research

might undertake to answer the questions: What are the
criteria for ego identity in females? To what extent do
these overlap with those for males? Can we construct
similar Identity Statuses? Certainly the following state-
ment suggests no solution, but the answer to the above
questions lies at least partially in answering the tri-
partite question that American women must deal with in
resolving the identity crisis: What does it mean to be
one who can be a mother, must be an attractive lover, and
ought to be an intellectually competent (and competitive?) ——
individual.

To summarize, the most fruitful lines for extension
of the present research on measures of ego identity would
seem to be: further establishment of empirical referents
for the Statuses; specification and measurement of ante-
cedent conditions, particularly parent variables; and
extension of inquiry into the criteria for ego identity in
females.

CHAPTER VI

SUMMARY

The main task of this study was to develop and
validate measures of ego identity, a concept describing the
successful resolution of the phase-specific identity crisis
occurring during adolescence. In the process of developing
these measures, four styles of meeting the identity crisis
were described. These were referred to as Identity Statuses
and consisted of Identity Achievement, Foreclosure, Mora-
torium, and Identity Diffusion. Criteria for membership in
a Status involved a S's standing on two variables, crisis
and commitment, in two main areas, occupation and ideology,
the latter divided into religion and politics. Identity
Achievement and Identity Diffusion represent concentration
points at the extremes of a continuum of the achievement of
ego identity; the Diffuse individual has failed to solve the
issues of identity crises and has not committed himself in
major areas of his life. Foreclosure and Moratorium are
stylistic concentration points roughly intermediate in this
distribution.

151

Measures constructed were the Ego Identity Incomplete Sentences Blank, a twenty-three item sentence completion test intended to measure overall ego identity, and the Identity Status Interview, a semi-structured interview designed according to criter. for Identity Statuses and intended to locate a S in one of the four Statuses. Inter-judge reliability was established for these measures in both a pilot study and the present study.

The experimental tasks, designed to validate the constructs underlying these measures, consisted of Ss' change in scores on a self-esteem measure following either a positive or negative invalidated self-definition and their performance on a concept attainment task administered under stressful conditions. Supplementary measures included a test drawn from the "authoritarian submission and conventionality" cluster of the F scale, Ss' reactions to the invalidated self-definition, and level of aspiration measures on the concept attainment task.

The two central hypotheses of the study stated that Ss who scored high on the EI-ISB and Ss high in Identity Status, particularly Identity Achievement Ss, would change less in self-esteem after an invalidated self-definition and perform better on the concept attainment task than Ss low in EI-ISB

153

and in a low Identity Status, particularly Identity Diffu-
sion. Other hypotheses involved the predictions that Fore-
closure Ss would score higher on the F scale than other Ss,
that ego identity would increase with year in college, that
high EI-ISB and high Identity Status Ss would obtain higher
initial self-esteem scores, and that Ss high in ego identity
and Identity Status would show more realistic goal-setting
patterns in LOA measures on the concept attainment task.

All of the 86 Ss who served in the experiment were
college males between the ages of 18-21, most of whom were
required to participate in an experiment for course credit.
The concept attainment task was administered by ten trained
confederate Es in one day so as to minimize contamination
by inter-subject communication.

Ss were given the measure of ego identity and the
combined self-esteem - authoritarian scale in class. Each
S was then seen in a fifteen-thirty minute interview to
establish his Identity Status. The EI-ISB's were not scored
until the interviews were all completed; in addition, they
were independently coded and names of Ss blocked out. The
interviews extended over two months. On the day of the
experimental situation, Ss went through the following sequence
of events: concept attainment task under the stressful

conditions of evaluation apprehension and over-solicitousness

provided by the task E; a positive or negative invalidated

self-definition given by the author, in which the S was told

that he was either more or less mature and self-confident

than he estimated himself to be or than other Ss were; and

a second administration of the self-esteem scale. All Ss

were subsequently informed of the false information they

had been given by the E. The task Es were not aware of

either the Ss' EI-ISB scores or his Identity Status, and,

of course, CAT performance scores were not known at the time

Identity Status Interviews were given.

Results, on the whole, for the EI-ISB were insignif-

icant except for its relationship to Identity Status and

self-esteem. The conclusion here was that EI-ISB in its

present form is extremely limited in its validity and that

no justifiable claim can be made for it as an overall measure

of ego identity.

Results for Identity Status indicate that those Ss

high in Identity Status perform better on the stressful

concept attainment task and that Identity Status increases

with year in college. Findings for the individual Statuses

showed Identity Achievement generally superior on all

measures to Identity Diffusion. The Foreclosure Status

received significantly higher F scale scores and higher D

scores, the latter being a level of aspiration measure

indicating unrealistic goal-setting. Ss in the Moratorium

Status performed significantly more variably on the CAT

than other Statuses, and, in general, seemed to most resemble

the Identity Achievement Status. Categories as well as

ratings of Ss' reactions to the invalidated self-definitions

were made and while there were no significant differences

among the Statuses, there seemed to be a trend for low Iden-

tity Status Ss to accept the false information more than

high Identity Status Ss.

The hypothesis concerning greater change in self-esteem

as a function of low ego identity and low Identity Status

failed to be confirmed. It was suggested that this was

due to fluctuation in Ss' self-esteem scores, independent

of the experimental treatment, over the two month period

between the test's first and second administration - essen-

tially a problem in unreliability.

Suggested extensions of this research include: item

analysis of the EI-ISB; refinement of experimental design

to adequately test the change in self-esteem hypothesis;

development of criteria for ego identity in females; possi-

ble ramifications of over-solicitousness as stress for

psychotherapy; and the specification of antecedent conditions,

in the form of parent variables, to Identity Status.

The main contribution of this study lies in the development, measurement, and partial validation of the Identity Statuses. It cannot be said that an adequate measure of overall ego identity has been developed here.

INCOMPLETE SENTENCES BLANK

Name_____Age_____Class_____

Marital Status_____Date_____

Complete these sentences to express <u>your</u> <u>real</u> <u>feelings</u>. Try
to do every one. Be sure to make a complete sentence.

1. For me, success would be _____

_____

2. The difference between me as I am and as I'd like to be

_____

3. When I consider my goals in the light of my family's goals

_____

4. I'm at my best when _____

_____

5. Sticking to one occupational choice _____

_____

6. When I let myself go I _____

_____

7. I chose to come to this college after _____

_____

8. If someone were to ask me who I am, I would say _____

    _____

9. I am really convinced that _____

    _____

10. When I was a child, I _____;

    whereas, now I _____

11. I know that I can always depend on _____

    _____

12. (Choose only one) I am _____

    I am not _____

13. It seems I've always _____

    _____

14. I wish I could make up my mind about _____

    _____

15. Getting involved in political activity _____

    _____

16. I would most like to be like _____

    _____

17. What happens to me depends on _____

    _____

18. As compared with four years ago, I _____

    _____

19. I belong to _____

    _____

20. To change my mind about feelings toward religion_____

    _____

21. If one commits oneself_____

    _____

22. My place in society_____

    _____

23. If I had my choice_____

    _____

24. Ten years from now I_____

    _____

25. It makes me feel good when _____

    _____

APPENDIX II

EGO IDENTITY
ISB

In general:

1. Any answer indicating a commitment to one of the
    three major areas* is, a priori, higher than a 1.

2. Any blatently pathological or self-derogatory
    statements and those containing mutually exclusive
    clauses are scored 1.

3. All blanks are scored 1.

4. Trivia and inappropriate humor are given a 1 -
    except where noted in the specific question cri-
    teria.

5. When the individual sees himself as having over-
    come, or capable of overcoming barriers to achieve-
    ment of personal goals, generally scored 3.

---

*occupation, religion, politics

160

1. For me, success would be _____

<u>3</u> -- In line with occupational choice.

    E.g.--"realizing my ambition to be a practicing
        veterinarian."
       "to obtain a degree in optometry, have a
        profitable practice, and a home, and a
        family."
       "the achievement of a large amount of com-
        petence in my main career, namely
        engineering."
       "being a brilliant and recognized authority
        in my academic field."

<u>2</u> -- Any goal involving action on the part of the indi-
    vidual -- an emphasis on attaining--i.e., doing or
    getting as opposed to having or being given to.

    E.g.--"fulfilling my state in life in the career I
        am following."
       "in what I do, not in how much money I earn."
        (philo.)
       "attainment of the Ph.D. degree and its
        associated prestige and status." (specific)
       "knowing, loving, and serving God daily more
        and more with my wife, family, and friends."
       "a good job with a family and enough money to
        support them."

<u>1</u> -- General security and happiness -- the idea that
    success would be "nice," but no specification of
    what its components might be. Or mutually exclu-
    sive clauses.

    E.g.--"would be in the form of pleasure."
       "desirous."
       "to be superior and to be accepted by others."
        (for most of us, mutually exclusive)
       "an inner feeling of self-satisfaction."

2. The difference between me as I am and as I'd like to be

---

3 -- Any indication that the difference is generally
     small. The answer can be somewhat trivialized (see
     first example) if it is meaningful in terms of the S.

     E.g.--"three quarters of college."
           "is small."
           "is very likely to be dissolved in time."

2 -- Mention of a specific trait.

     E.g.--"I have potential, but lack a certain amount
             of drive."
           "is that I'd like to have more strength of
             character and security in what I am."
           (close to a 1)
           "I'm not aggressive enough and don't try as
             hard as I should in all I do."
           "I have yet to attain success in engineering."

1 -- A very great discrepancy between real and ideal self.

     E.g.--"is physical and personal shortcomings."
           "I'd like to be a better person in the eyes
             of God."
           "is great."

EGO IDENTITY

3. When I consider my goals in the light of my family's
   goals _____

   <u>3</u> -- Either directly opposite to family goals with evidence
         of some commitment, or a difference from family's
         goals with commitment. Not enough to say simply:
         "They're different." Ideally, a <u>3</u> here would reflect
         a continuity--family goals transformed by the indi-
         vidual into his own style.

         E.g.--"they do not tend to approve of my goals and
                   thinking."
               "they are of a higher nature than my family's."
               "I realize that the ultimate goal is similar,
                   although the pathway is different."
               "I feel that they're missing a lot."

   <u>2</u> -- Some goals the same, some different, but very little
         evidence of firm commitment. Or indeterminate
         statements, such that one cannot assess whether or
         not a difference exists.

         E.g.--"I find them somewhat the same."
               "not much difference, but a little."
               "I wonder if I'm aiming too high."
               "there is no comparison." (indeterminate)
               "I am happy and so are they." (indeterminate)

   <u>1</u> -- Direct harmony, exactly the same.

         E.g.--"they are basically the same."
               "we end up agreeing on my family's goals."
               "they are consistent."

EGO IDENTITY

4. I'm at my best when _____

> 3 -- Self-initiated action (i.e., doing something) or
> competition, or little dependence on environment,
> or activity in line of occupational choice.
>
>> E.g.--"I'm on my own and have sole responsibility
>>   to get a given job done."
>> "I'm doing work I enjoy."
>> "I'm talking about music." (career)
>> "I'm competing with others in the classroom
>>   or under conditions conducive to pressure."

> 2 -- When the environment shifts to suit the individual,
> or when there is absolutely no pressure at all.
>
>> E.g.--"my mind is clear of all worries, even trivial
>>   ones."
>> "I'm happy."
>> "I'm with my family and being alone."
>> "under a small amount of tension."
>> "I'm in familiar surroundings." (dependent
>>   on environment)

> 1 -- Either seldom "at his best" or completely dependent
> on external factors.
>
>> E.g.--"I've had something to drink."
>> "other people are helping me."
>> "someone tells me what should be done."

COMMITMENT

5. Sticking to one occupational choice _____

    3 -- Practically unequivocal endorsement.

        E.g.--"is not difficult for me -- it is law."
           "until I have determined whether or not I
             will enjoy it is very important."
           "is what I plan to do -- teaching."
           "suits me fine."

    2 -- Conditional endorsement; or generally low commit-
       ment to the whole principle, or concern with diffi-
       culty of following through on it.

        E.g.--"is all right if you're a success in it."
           "is difficult to do since it demands a great
             deal of assuredness as to one's capability
             of making a choice."
           "is sometimes difficult."

    1 -- Generally negative feelings toward the idea, or
       very little endorsement accompanied by a tone of
       pessimism as to feasibility, or statement of a de-
       sire to remain uncommitted. In a 2, one may be
       convinced that it's a fairly good idea but can't
       achieve it; in a 1, one isn't so sure it's even a
       good idea.

        E.g.--"has too much hindrance on one's personality."
           "does not enchant me, but it will probably be
             necessary."
           "is something I have not yet been able to do."
           "can be a bad idea if the choice is poor."

EGO IDENTITY

6. When I let myself go I _____

    3 -- Non-disastrous self-abandonment. Luxuriating in
       physical release.

       E.g.--"have a good time and do not worry about
           others' thoughts and standards."
         "enjoy almost anything that has laughter and
           some physical activity involved."
         "enjoy myself more."
         "am most apt to do well."

    2 -- Cautiousness, or don't quite know what will happen,
       or have to be careful. Defensive or trivial.

       E.g.--"never know exactly what I will say or do."
         "laugh and have a good respectable time."
         "act very silly."
         "sleep."
         "might be surprised since I don't remember
           letting myself go."
         "don't change much from my regular self."
         "that is, withdraw and analyze any problem or
           situation, I am usually able to return to
           it and solve it satisfactorily."

    1 -- Go all to pieces, or dangerous, or self-destructive,
       or better not to.

       E.g.--"think I talk too much about myself and my
           personal interests."
         "sometimes say things I later regret."
         "tend to become too loud when sober and too
           melodramatic when drunk."
         "say or act in a way that is not of benefit
           to me or to anyone associated with me."

CRISIS

7. I chose to come to this college after_____

    3 -- Some thought or consideration on the part of the S
        went into planning. Going to a college because it
        offers the best training in his occupation.

        E.g.--"considering others in view of what they had
                to offer me."
              "deciding on my career."
              "I found it was the best in numerical analysis."
              "comparison of what costs were at OSU and
                other schools, taking into account my
                financial means."

    2 -- An answer indicating only a chronological sequence,
        not an active decision. Or, some indication that
        there was little choice, although not entirely
        precluding choice. Or, more convenience.

        E.g.--"deciding to take summer work and have my
                credits transferred to Dartmouth."
              "moving to this city."
              "my junior year."
              "I found it was the only agriculture college
                in the state."

    1 -- There was little or no choice - choice practically
        precluded; or S had to, or was made to; he took
        little part in decision.

        E.g.--"not too much consideration."
              "I was rejected from other schools."
              "my parents talked me into it."

COMMITMENT

8. I am really convinced that_____

    <u>3</u> -- A positive statement relating to commitment in one
       of the three major areas - or relating directly to
       the concept of ego identity; or Protestant ethic
       type statements.

       E.g.--"music is the finest career for me."
           "success at anything is achieved mainly
              through hard work."
           "my goal in life is to be with God forever."
           "if a person tries, he can be a success on
              his own terms."

    <u>2</u> -- Introspective, philosophical, "searching for truth,"
       generally positive statements but not so directly
       related to the three main areas or to ego identity.
       Statement characterizing self, but not necessarily
       showing ego strength - perhaps just self esteem.

       E.g.--"sex is the primary motivation in my life and
              a number of others' lives."
           "most things turn out best in the end."
           "I must work harder and develop better study
              habits if I am to have success in the grad-
              uate study of my choice." (more intro-
              spective than just a bald statement of the
              "hard work" ethic)
           "I will someday have most of what I want."
              (emphasis on "having" rather than "getting")
           "I am a far better person since coming to
               college."

    <u>1</u> -- Humour, trivia, or statements concerning purely
       external factors which signify little investment on
       the part of the <u>S</u>.

       E.g.--"Americans are growing fat, lazy, and too
              complacent, although Compoz seems to be
              needed for a few."
           "A college education has done many good things
              for me."
           "two plus two equals four."

EGO IDENTITY

9. When I was a child, I ____; whereas, now I _____

    3 -- Strong change in over-all personality; or a re-
        formulation in adult terms of childhood antecedents;
        or change in one of the three major areas.

        E.g.--"was a babe in arms" -- "am a father and a
                teacher with many babes in arms."
              "very timid" -- "reserved and respond when
                necessary." (adult form of childhood
                antecedent)
              "took religion more or less seriously" --
                "find belief in God truly necessary."

    2 -- Change in most any specific trait, e.g., in person-
        ality or body image.

        E.g.--"fatter than I am now" -- "not as fat."
              "was lonely" -- "I am not."
              "not as aware of reality" -- "I am."

    1 -- Trivial or stereotyped. Also, no change, or nega-
        tive change.

        E.g.--"played in the sandbox" -- "no longer do."
                (trivial)
              "thought about everything" -- "like to do the
                same." (no change)
              "thought as a child" -- "am a man and I think
                as a man." (stereotyped)
              "little and insecure" -- "big and insecure."
                (negative change)
              "spent money too freely" -- "know better,
                but still tend to do the same thing."
                (no change)

EGO IDENTITY

10. I know that I can always depend on _____

   3 -- Self

       E.g.--"my own self, then maybe my aunt, then
               possibly my mother."
             "my mind and diligence to surmount any
               barrier."
             "my reflexes to get me out of a hard situ-
               ation."

   2 -- Others, if I do my part.

       E.g.--"myself and my parents."
             "nothing except books. They will always
               'respond' if you demand it of them."
               (questionable)
             "the good will of others, if I treat them
               right."

   1 -- Others solely, or no one, or trivia.

       E.g.--"on my Army commission for security in the
               future."
             "God, when I am down or troubled."
             "Columbus weather to change."

COMMITMENT

11. (choose one) a. I am _____
                  b. I am not _____

3 -- Choice of a. (excluding trivia) A positive
     statement indicating ego strength in the form of a
     self-characterization, or a statement of commitment
     to one of the three major areas.

     E.g.--"the right type of person to go into my
           chosen vocation."
           "determined to be a successful veterinarian."
           "happy to be a fireman in Ashville."

2 -- Choice of either a. or b. If a., a much more
     limited self-description, perhaps related to
     imminent direct action or to future activity out-
     side of the three main areas; or mention of a
     singular personal trait or hobby; or any searching,
     introspective, philosophical answer. If b., must
     be a fairly positive statement about self in order
     to get a 2.

     E.g.--"anxious to get married."
           "going to raise my children in a Christian
           home."
           "inclined to think carefully before acting."
           "an amateur radio operator."
           "a realistic perfectionist."
        b. "hard to get along with."

1 -- Choice of b. unless quite positive as noted in 2;
     or trivia or pathological answers.

     E.g.--"entirely pleased with what I have made of
           my life up until the present."
           "sure I will be able to finish school."
           "as grateful as I should be."
        a. "6'9" tall."
        b. "living a waiting existence."

EGO IDENTITY

12. It seems I've always _____

    3 -- Statement reflecting self-initiative or commitment
       in one of three main areas, or indication of some
       sense of continuity with past.

       E.g.--"done everything on my own with little advice
            from anyone."
         "wanted to be a teacher."
         "been able to make friends."
         "been given a chance and it's up to me to do
           something with it."
         "been happy with my religion."

    2 -- Introspective, yet not negative self-evaluation;
       also, vague commitment.

       E.g.-"been a perfectionist."
         "wanted to go to college."
         "had a desire to travel."

    1 -- Negative self-evaluation or trivia, or responses
       indicating a conflict.

       E.g.--"tended to make life difficult for myself--
           been my own worst enemy."
         "been inhibited from reacting to certain
          things."
         "wanted to be liked and respected, yet wanted
          to be a leader." (some conflict)

COMMITMENT

13. I wish I could make up my mind about _____

   3 -- <u>Specific</u> goal-directed issues - unless trivial.

     E.g.--"being a full-time fireman or making use of
         my education in industry."
        "what to do about the girl I'm dating."
        "my college choice for law school."

   2 -- More broad philosophical questions, weltenschauung
     and weltschmerz, introspective.

     E.g.--"sex."
        "what is really important in life to me."
        "my true vocation."
        "the mentality of the average person and
         what he is like."

   1 -- Either nothing to very many things; or trivia.

     E.g.--"buying a new car."
        "where I want to go on my vacation."
        "nothing, really."

COMMITMENT

14. Getting involved in political activity _____

   <u>3</u> -- Full personal endorsement, something that the S, himself, should do.

      E.g.--"appeals to me on an international, geo-
            political level."
            "is necessary."
            "is my duty, as well as every citizen's."

   <u>2</u> -- Endorsement with reservations; or S feels it's a good idea for other people - what <u>they</u> should do. Or conflicted.

      E.g.--"is interesting to me, but not in any excess."
            "is for someone who desires it."
            "is as futile as it is necessary."

   <u>1</u> -- Disclaims personal interest; or sees mainly obstacles involved.

      E.g.--"doesn't appeal to me."
            "is not my idea of a good thing to do."
            "is dangerous because your job may depend on
            one party or another."

EGO IDENTITY

15. What happens to me depends on_____

    <u>3</u> -- Self, and self is not seen as inadequate.

        E.g.--"how well I adjust to the world."
           "what I do with situations as they confront
              me."
           "my ability to make correct decisions."
           "my school work and my ability to learn
              outside of school."

    <u>2</u> -- Others and self; also, if self is seen as inadequate.

        E.g.--"my desires, God's plan, and surmountable
              obstacles."
           "on me, and to some extent, society."
           "my maturity, as yet, not developed exten-
              sively."
           "my actions and the cooperation or lack of
              cooperation of my associates."
           "my grades in college and whether or not I'm
              accepted at vet school."

    <u>1</u> -- External factors.

        E.g.--"time."
           "fate."
           "my days in college."

CRISIS

16. As compared with four years ago, I_____

    <u>3</u> -- Change in occupational plans or future goals.

        E.g.--"am much more mature and dedicated to my
            goals."
          "have improved in my knowledge of earthly
           and spiritual goals.
          "I've consolidated my goals and made them
           seem a little more realistic."

    <u>2</u> -- Change in an area of personality or non-s$_{\cdot}$ecified
       change, or general maturity increased.

        E.g.--"feel more sure of self, more able to make
            correct decisions."
          "am wiser, more settled, more mature and
           understanding, can think more objectively."
          "more realistic, and, I think, more intel-
           ligent."

    <u>1</u> -- Not much different now than then. Also attempts
       at humour and trivia.

        E.g.--"am the most evil of evil."
          "haven't changed much."
          "have put on some weight."

EGO IDENTITY

17. I belong to_____

    3 -- Specific group mentioned, or strong group feeling.

        E.g.--"a Protestant church."
            "the numerical computation lab."
            "my fiancee, my parents, the Caucasian race,
              and the Presbyterian Church."
            "the Ashville fire department, the Ashville
              Community Club, and the Kiwanis--and I am
              proud of all these.

    2 -- Non-specific mention of group, or endorsement of
       group affiliation.

        E.g.--"to my family and then society."
            "nothing, but will join an organization of
              my own volition."
            "the conformist society, although I'd much
              rather be a sensible individualist."

    1 -- No one (alienation), one person, or trivia.

        E.g.--"Carole."
            "no one crowd or click (sic) but have friends
              of many different backgrounds."
            "few organizations."
            "God."
            "no one but those to whom I want to belong to."
            "a mutual admiration society."

COMMITMENT

18. To change my mind about my feelings toward religion_____

   3 -- Extremely difficult or impossible.

       E.g.--"would require a terrific amount of con-
              vincing by some authority."
             "would be difficult."
             "is impossible."

   2 -- Might not be probable, but retains a feeling of
        possibility.

       E.g.--"would be somewhat difficult unless a con-
              vincing argument is presented."
             "I would have to find a better one."
             "is not hard to do, but I keep going back
              to the religion I started with."

   1 -- Would not be too difficult.

       E.g.--"seems a logical thing to do if my inner
              belief changes."
             "I would have to know something about reli-
              gious beliefs."
             "is something I'd be likely to do."

COMMITMENT

19. If one commits oneself_____

    3 -- Personal endorsement of the principle, a feeling
         that one must fulfill commitment.

         E.g.--"he should finish the task."
               "he should follow that path until he finds
                barriers, at which time he should challenge
                the barriers or pursue another course."
               "he should follow through."

    2 -- There still remain some loopholes, or dubious
         endorsement of the principle, or cautiousness.

         E.g.--"one must know oneself."
               "and firmly believes he is right (using the
                knowledge he has, I think he should forge
                on. Of course, when circumstances change,
                he should change."
               "he should have made certain beforehand he
                was correct."
               "he should never be so proud that he won't
                change his expressed opinion if proven
                wrong."

    1 -- Disasterous, or a better idea not to.

         E.g.--"then he isn't free to change his mind when
                he wants to."
               "then he's stuck with his choice."
               "then he's liable to miss a lot of opportun-
                ities."

EGO IDENTITY

20. My place in society_____

    3 -- An answer reflecting some knowledge of individual's
       position or role and some active commitment to it.
       Cog-wheeling. Contribution.

        E.g.--"is in the lower middle class and I hope to
             raise my status through a college edu-
             cation."
           "is in the technical fields such as math,
             physics, etc."
           "is to help others."
           "is to get a good education and to use it to
             further my knowledge of my field."

    2 -- In definite opposition to society or indeterminate
       or no particular contribution mentioned. Also,
       any assertion that the individual can make it
       what he wants to.

        E.g.--"is presently mobile."
           "is in the upper middle class."
           "wavers between that of a critic and that
             of an acceptor."
           "where I make it."

    1 -- Pre-determined, individual plays no part, or
       doesn't really belong anywhere. Lack of social
       conscience.

        E.g.--"is not what it should be."
           "has not been revealed yet."
           "probably much smaller than I like to think."
           "is to better my own position and what I
             contribute to society is incidental."

COMMITMENT

21. If I had my choice _____

    <u>3</u> -- Occupation or career-oriented positive statement;
        also realistically positive statement about self,
        or making reasonable changes in world.

        E.g.--"I would rather have my DVM than a Ph.D. in
              anything."
            "I would do things as I have."

    <u>2</u> -- Career or self-oriented but unrealistic or with
        regrets over past. Or philosophical statements.

        E.g.--"I might have entered medicine."
            "I would not change anything I have done so
            far in life or plan to do in the future."
            (unreal)
            "I would always choose what is good and right."
            "I would finish college as soon as possible."

    <u>1</u> -- A disavowal of having any choice. Or trivial
        statements.

        E.g.--"I have no choice, my events are determined."
            "I'd buy a new Buick."
            "I would vote for Romney instead of Goldwater."
            "I would live in a warm climate such as S.
            Calif. or Hawaii."
            "I would be playing golf now."
            "I would remain unmarried." (anti-commitment)

COMMITMENT

22. Ten years from now, I _____

    <u>3</u> -- Fairly well established occupational plans - mention
       of occupation - realistic.

       E.g.--"hope to be established in a community prac-
            ticing veterinary medicine."
           "expect to be a successful engineer."
           "will be teaching school."

    <u>2</u> -- Ideals of what "the good life" would be without
       specifying occupational role. More fantasy-
       oriented.

       E.g.--"would like to hold an executive position in
            a large corporation."
           "hope to have settled in the community, have
            a good job, have a family, and be able to
            enjoy the riches of life."
           "hope to be doing my share in the world where
            I have been blessed to live."
           "hope I will be capable of settling down with
            one woman."

    <u>1</u> -- Pessimistic, trivial, or doesn't know.

       E.g.--"shall still be unhappy."
           "will be 34."
           "don't know where I will be or what I will
            be doing."

EGO IDENTITY

23. It makes me feel good when _____

3 -- Self-initiated action. Self is the center of
gravity in evaluation.

E.g.--"I know I'm learning."
"I look back on the progress I have made in
life."
"I do something that someone else has failed
or something that helps me attain what I
want."
"I am praised for things I consider worthy of
praise."

2 -- Not directly self-involved, or when the environment
works out the right way, or vague accomplishment,
or when others do things for themselves.

E.g.--"I think of Dr. _____ and hope someday I, too,
will be a success as he is."
"I think of all the nice things that can
happen in a lifetime."
"I please other people and myself."
"people put out extra effort to accomplish
what they strive for."

1 -- Other-centered, others are central to evaluation
of self.

E.g.--"the female of the species tells me I have
sex appeal."
"I know that people think favorably of me."
"I can be with my fiancee and know that she
loves me."

APPENDIX III

IDENTITY STATUS INTERVIEW

Introduction

What year are you in?
Where are you from?
How did you happen to come to Hiram?

Did your father go to school? Where? What does he
do now?
Did your mother go to school? Where? What does she
do now?

Occupation

You said you were majoring in _____; what do you plan
to do with it?
When did you come to decide on _____? Ever consider
anything else? When? What seems attractive about
_____?
Most parents have plans for their children, things
they'd like them to go into or do - did yours have any
plans like that?
How do your folks feel about your plans now?

How willing do you think you'd be to change this if
something better came along? (If S responds: "What
do you mean by better?") Well, what might be better
in your terms?

Religion

Do you have any particular religious preference? How
about your folks?
Ever very active in church? How about now? Get into
many religious discussions?

How do your parents feel about your beliefs now? Are
yours any different from theirs?

Is there any time when you've come to doubt any of
your religious beliefs? When? How did it happen?
How are things for you now?

Politics

Do you have any particular political preference? How
about your parents?
Ever take any kind of political action - join groups,
write letters, carry signs - anything at all like
that?
Any issues you feel pretty strongly about?
Any particular time when you decided on your political
beliefs?
Whom would you like to see president?

Do you have any questions to ask me?

MANUAL - IDENTITY STATUS TAPES

The main objective of rating each interview is to locate the individual on a dimension of the variable, ego identity. This construct refers to the outcome of a particular life crisis faced by older adolescents in our culture. Elements in this crisis include deciding upon and committing oneself to what one is "to be" in terms of an occupation, as well as formulating and taking action on what one "believes" in terms of an ideology. In a more formal sense, the achievement of ego identity involves the synthesis of childhood identifications in the individual's own terms, so that he establishes a reciprocal relationship with his society and maintains a feeling of continuity within himself. Erikson has referred to this psycho-social relationship (individual to society) as a "cogwheeling" of mutual needs. Elaborating further, childhood can be viewed as a period when society provides the materially and emotionally nutritive milieu for survival of the almost wholly dependent child. Adulthood involves a shift in responsibility, so that the individual is expected to contribute to the previously nurturant environment in a

186

more mutual relationship. Adolescence, in particular, late adolescence, is the period during which this shift takes place. The achievement of an ego identity at this time represents the reformulation of all that the individual was into the core of what he is to be.

The interviews are to be classified into one of four categories which form a continuum representing the degree of ego identity achievement. These four categories, known as "identity status" are: Identity Achievement, Foreclosure, Moratorium, and Identity Diffusion. Each category is to be further subdivided into High, Medium, or Low "adaptability to environmental press." Thus, the ratings one ends up with look like: Foreclosure - High.

The two referents which this study employs for determining identity status are "crisis" and "commitment." The term, crisis, was chosen less for its sense of immediacy than for its connotation of struggle, or more accurately, of a period of decision. Commitment refers to a certain unwaveringness of choice, a reluctance to abandon a path set out upon. Although these two referents are separately assessed, some overlap occurs. For example, when a subject says that he decided to go into industrial management in his junior year as a result of scanning the college catalogue, one does

not get a sense of either an active selection among personally
meaningful alternatives (crisis) or an unswerving investment
in a course of action (commitment).

Instructions for rating

The following is a description of the way in which these
two criteria are combined to yield an identity status and a
short sketch of how each type might appear.

1. Identity Achievement

Criteria: The individual has passed through a decision
period or crisis and appears committed to his occupation
and/or ideology.

Sketch:

Occupation - He has seriously considered several
occupational choices or deviated from what his parents had
planned for him. He is reluctant to switch fields and seems
to think of himself as a teacher, engineer, etc. (Being a
something meaning the difference between "taking courses in
education" and seeing oneself as "a teacher.") Although his
ultimate choice may be only a variation of the parental
wishes, he seems to have experienced a crisis period and
made a resolution on his own terms.

> 1. Has tried business--focused on general
> medical profession--tried dentistry, tried phar-
> macy--now in optometry. Likes it because it's

189

it's in the area of helping people medically and
has variety. (willing to change?) "I really like
what I'm doing. I have too much investment in it
now to do anything else."

2. Came from farm background and likes farming,
but being a farmer not too interesting or feasible.
Decided to go into agricultural economics which is
sort of an over-all farming as a viable career.

3. When first went to college felt no sense of
purpose. Left and joined the Army. Came back with
renewed interest. Finds present choice interesting
and would be willing to change only routine func-
tions, not the general area.

4. Father was a farmer and wanted him to be
one; mother and townspeople wanted him to be a
minister; he decided to be a veterinarian. "I
would rather have my DVM than a Ph.D. in anything."

Religion - He appears to have gone through a period

of doubt--either of past belief or unbelief--with a resulting

re-evaluation of faith and commitment to some action (church-

going, religious discussions, etc.). Whether he ends up as

religious or not religious (in the conventional sense) is not

important--only that he seems to have rethought childhood

concepts and achieved a resolution that leaves him free to

act.

1. Gotten further away from religion. At one
time, 10-11 years old, wanted to be a rabbi. Goes
to Hillel sometimes now. Disputes religious
questions with Christian friends--tried to convert
a Roman Catholic nurse.

2. Went through a period of rejecting father's
religion. Period of atheism followed disillusion-
ment with a God that would permit an evil world.

Resolved by deciding that amount of good balanced evil. Is active in church and plans to raise his children in it.

3. Parents were fundamentalist; they think man shouldn't explore space. He's more liberal, thinks they're old-fashioned—doesn't like denominational splits. Active in church.

Politics - The presence of his crisis period is probably more difficult to ascertain here than in the other two areas. He shows some difference from his parents' opinions; for example, he may see himself as more liberal than they are. Evidence of commitment is usually seen in the affective nature of his pronouncements, his tendency to dispute political questions with others, and any political action-taking whatsoever.

1. No affiliation with any one party. Argues with parents about particular candidates and issues.

2. Period in Army angered him at being given things and being reacted to according to group membership rather than as an individual. Attracted to the individualism of conservatism and is anti-social welfare. Applies principles learned in college classes about human nature to his political beliefs.

General Comment - He seems generally able to "make it." Particularly, he does not appear as if he would be overwhelmed by sudden shifts in environment or by unexpected burdens of responsibility. He also seems to be making some solid interpersonal commitments—e.g., marriage, engagement, etc.

2. Foreclosure

Criteria: The individual does not seem to have passed through any real decision period, but, nevertheless, appears committed to occupation and/or ideology. In this case, his choices coincide with those of parents or parent surrogates whom he does not seriously question.

Sketch:

Occupation - It is difficult to distinguish where his parents' goals for him leave off and where his begin. He seems to have experienced either no choice period, or only brief and inconsequential ones. He is becoming what others have influenced him or intended him to become as a child. In addition, all of this seems ego-syntonic. Childhood identification figures ("like my father," "like my mother," etc.) keep cropping up in the interview.

> 1. "I'm not in any mood to leave home. I'm not tied to my mother's apronstrings, but all my friends are there." Wants to go into a large corporation where "they'll run me through training and tell me how they want things done." Is also considering being a fireman like father was. Went home every weekend throughout college and maintained membership in social groups there (e.g., Kiwanis, Volunteer Fire Dep't.).

> 2. Father was a farmer, he'll be a farmer. "I plan to go back and help dad farm." Took agriculture at college because "that's all I knew." Although he gave some consideration to other fields, "farming was always at the top of the list." "I was brought up like my family was--I was with them so long I just stayed that way."

Religion - His faith (or lack of it) is virtually "the faith of his fathers (or mothers, as the case may be) living still." College experiences serve only as confirmation of childhood beliefs. Dissonance seems absent, and he participates in religious or anti-religious activities.

1. Although in science, sees no conflict with religion. "Just helps strengthen the belief I grew up with." Goes to church several times a week.

2. Parents were Lutheran and so is he. No doubting of religion during college. Got a girl pregnant and prayed--everything turned out all right. "Hand of God was there; I'm not smart enough to figure it all out, but I believe."

3. "Same as my parents." (any doubts?) "My beliefs are the same as they were--only stronger since I've been out in the world."

4. Religion is the same as parents. "Maybe it's a habit with me, I don't know." "I've thought a lot and you meet all kinds of people here. But I really haven't changed any basic beliefs. Just have more understanding than I did before." "I plan to bring my children up in the church--just the way my dad did with me."

Politics - Again, he is what his parents are with little or no personal stamp of his own.

1. His parents were Republican and so is he. "There was a lot of influence from my parents."

2. He and his parents are Republican. "I guess it stems from the family. Both Mom and Pop are Republicans."

3. "I'm a Democrat and so are they (parents)-- so that's why, I guess."

> 4. Referring to him and parents both
> being Republican: "You still pull that way,
> Republican, if your parents are that way. You
> feel like it's where you should be."

General Comment - Because of his commitment and apparent self-assuredness, he appears similar to the Identity Achievement; although he may be characterized by a certain rigidity. One feels that if he were placed in a situation where parental values were non-functional he would soon be greatly at a loss. In many instances, only a situation of severe ego stress would differentiate him from Identity Achievement. However, his hallmark is the notable absence of decision periods. Frequently, his plans include returning to his hometown and continuing life there.

3. Moratorium

Criteria: The individual is presently in a crisis period--trying to make up his mind. Commitments are likely to be vague and general. An important quality here is a sense of active struggle among alternatives.

Sketch:

Occupation - He is dealing with issues often described as "adolescent." He is concerned less with preparing for a specific career than with choosing that career. His parents' plans are still important to him, and he must somehow achieve a compromise among them, society's demands,

and his own capabilities. It is not that he feels totally
bewildered and all at sea, but that he is vitally concerned
and somewhat internally preoccupied with resolving what at
times seem to be unresolvable questions.

1. "Other people think I'm jolly and free-
lancing. Inside, I'm a big knot. I'd just like
some peace and quiet." "The future seems better
than the past, though." "I'm not so concerned
about what people think, and I can control my
temper better." Majoring in Speech, wants to
work for degree in Psychology and Sociology while
in Army. In general, wants to do something to
help people.

2. Has considered rabbinate, law, and teaching.
Present major is philosophy and religion. Thinks
now he wants to teach--struggling with parents'
demands that he choose a career more financially
rewarding.

3. Chemistry--physics--biology major. Con-
siders teaching high school and then going into
industry. Also in the back of his mind is the
ministry--still considering it. Seems to be an
idealistic vs. economic conflict. "I can go into
teaching, industrial chemistry, the ministry. I
can see myself in any of those three fields."

Religion - He seems to be dealing with fundamental
religious questions, not just a mere "shopping around" among
denominations.

1. Doubts existence of God and wonders whether
there is a Supreme Being. Scares him when he thinks
about it, but he still does. Has tentatively decided
there is a God.

2. Articulates pseudo-solution to science-
religion conflict by: "deciding that what I believe
and what I study are two different things--just
keep them separate."

<u>Politics</u> - Although he is in doubt about political
and religious commitment, he seems dissatisfied with the doubt
and is trying to effect a resolution.

    1. Leans toward Democrats--still votes for the
    best man. Maybe later he'll turn toward Republi-
    cans.

    2. "I just don't want to define myself in
    terms of reactions against things." "Sometimes the
    whole political realm seems sort of futile."

    3. Confused about politics. Is a Democrat,
    but has heard about conservatism and is questioning
    it. But then Rhodes disenchants him. Doesn't
    really know.

<u>General Comments</u> - In some cases, there may be a
denial of an internal struggle that, according to the data
presented by the subject, must be there. For example, in the
case of one subject's conflict between a scientific attitude
and religious belief, one suspects the finality of his
stated solution: "I just keep them separate." Also, some
subjects may show two or three different identity statuses
for one of the main areas. That is, occupational choice may
have elements of Identity Achievement, Moratorium, and Fore-
closure. Although these cases are rare, when one status does
not predominate, a scoring of Moratorium is given. At his
worst, a Moratorium is paralyzed, unable to act decisively
in one way or another--not because of a lack of commitment,
but because of equal and opposite commitment.

4. <u>Identity Diffusion</u>

Criteria: The individual has either experienced no crisis or has passed through a crisis--in either case, there is little, if any, commitment.

Sketch: There appear to be two types of Diffusion. One is a pre-crisis lack of commitment. The individual would be a Foreclosure if strong enough parental values had been established. However, it is possible that the parental attitude was one of "it's up to you; we don't care what you do." Under the guise of democratic child-rearing, the parents may have provided no consistent structure which could be a guide for the growing individual and later on, an image against which to compare himself. Because he never really <u>was</u> anything, it is almost impossible for him to conceive of himself as <u>being</u> anything. Whatever the case, the problems that are so immediate and self-consuming for the Moratorium never really occur to this "pre-crisis Diffuse" person.

The second type of Diffuse is the "post-crisis Diffuse" who seems committed to a lack of commitment. This individual actively seeks to avoid tangling alliances; his motto: "Play the field." No area of potential gratification is really relinquished; all things are possible, and must be kept that way. The main element that both pre- and post-crisis Diffuse persons have in common is a lack of commitment.

Occupation - No one occupational choice is really decided upon, nor is there much real concern about it (as contrasted with the Moratorium). There is sometimes little conception of what a person in the stated preferred occupation does in a day-to-day routine. The occupation would be readily disposed of should opportunities arise elsewhere. There is sometimes an "external" orientation, so that what happens to the individual is seen as a result of luck or fate.

1. Has considered priesthood, law, and teaching math. Sees himself as "bouncing around" from one thing to another. Language is strange and answers oblique. Takes roles of others and speaks to himself during the interview in admonishing tones as they would speak to him. Although there is some closure on choice of teaching, the whole interview is pretty bizarre. E.g., regarding leaving seminary: "It was shown to me not to be my vocation. Some people have desire, some don't. I didn't."

2. Going into optometry--likes it because there's not too much work, make money at it, and doesn't take too long to study for it. If something better came along, he'd change "quite easily."

3. Claims greater maturity after having flunked out of school and gone to service. Major in marketing, interested in business, also in being a golf pro. Main focus of interest in life is playing golf. Emphasis not on what his father wants him to "be" but on what his father gives him. "Very apt" to give up occupational choice for something better.

4. Major is engineering. In response to "willingness to change?": "Oh, I can change. I want to travel, want to try a lot of things, don't want to get stuck behind a drawing board. Want a degree mainly as an 'in' to production or something else. Don't want to get tied down."

Religion - He is either uninterested in religious matters or takes a smorgasbord approach, in which one religious faith is as good as any other and he is not averse to sampling from all. The subject will sometimes state his denomination as being the same as his parents, yet show little commitment to it. In this case, the identity status has elements of both Foreclosure and Diffusion.

> 1. "Don't believe in any one particular religion. All of them have something to offer, I guess. I like to look around a little and see what each has to offer."

> 2. "Haven't picked one religion. Not interested in any. Guess it's all right for some people. Just don't care a whole lot about it."

Politics - Both political and social interest are low. Little idea or concern where he stands vis a vis society, as if the world went its way and he went his with little intercourse between the two. In short, no cogwheeling.

> 1. "Politics just doesn't interest me." Doesn't vote. Doesn't discuss politics at home. Would probably vote for Kennedy.

> 2. No interest. Never discusses it with parents. "Not much concerned with politics." Unable, in the interview to verbalize a choice between Rockefeller and Kennedy.

General Comments - At his worst, a Diffuse exhibits the disorganized thought processes, disturbed object relations, and loosened ego boundaries associated with schizophrenia.

Environmental Press

Having once determined the subject's identity status, some evaluation of his over-all reaction to environmental press is to be made. This is intended to reflect the rater's opinion of how successful, in general, the individual is in coping with everyday situational demands. To a lesser degree, it should also be an estimate of future adaptability. While this is admittedly a global impression, its meaningfulness becomes apparent when considering, for example, two levels within the Identity Diffusion status. On one hand, one may find the High adaptability to press, Identity Diffuse, "play-boy" to whom everything in life is still "up for grabs," and who, although he makes sure that his grabbing never leads to his really holding fast to anything, still manages to maintain reasonable contact with reality and gratify most basic needs. On the other hand, one finds the Low adapta-bility to press, Identity Diffuse, pre-schizophrenic who appears extremely confused, very intensely internally pre-occupied. In a sense, he is stumbling and falling while the "playboy" is running around.

Summary

This, then, is the plan for rating the interviews. There are three main areas covered: occupation, religion, and politics. The latter two are combined to yield ideology.

Each area is assessed according to two criteria: the presence or absence of a crisis period, and the degree of commitment. According to the subject's standing on these two criteria, he is to be assigned to one of the four categories of identity status for each of the three main areas. In addition, once the over-all identity status has been determined, some estimate of the subject's adaptability to environmental press is to be made.

A sample of a complete interview rating is on the last page of the manual.

There are no rigid criteria for combining the three areas to yield an over-all identity status. Many times the rater will get a general impression from the interview that would not strictly coincide with an arithmetic sum of the three areas; these "hunches" are valuable and should not necessarily be abandoned for the sake of false rigor. Of course, in most cases, the final identity status will directly reflect the sum of the ratings of the areas. It should be clear that clinical judgment is to be exercised, not suspended.

Subject # __X_____

IDENTITY STATUS - INTERVIEW RATING SHEET
(Sample)

Occupation: ___Foreclosure_____

Religion: ___Foreclosure-Diffusion_____

Politics: ___Identity Achieve. - Foreclosure___

Ideology: __Foreclosure_____

IDENTITY STATUS: _____Foreclosure_____

ADAPTABILITY TO ENVIRONMENTAL PRESS: _____Medium_____

COMMENTS:

Use this space for note-taking and demurrers.

APPENDIX V

PILOT STUDY RELIABILITY DATA
FOR EI-ISB AND IDENTITY STATUS INTERVIEWS

TABLE 52

Percentage of Item-by-Item Agreement
on EI-ISB Scores Among Three Judges

Judges	Per cent of agreement
A with B	76%
B with C	78%
A with C	75%
Overall per cent of agreement	77.2%

TABLE 53

Coefficients of Reliability on
EI-ISB Scores Among Three Judges

Measures correlated	$\underline{r}$	$\underline{p}$	$\underline{N}$
Item-by-item			
A with B	.73	<.0005	442
B with C	.80	<.0005	442
A with C	.73	<.0005	442
Average item-by-item correlation	.76		
Total scores			
A with B	.89	<.0005	31
B with C	.94	<.0005	31
A with C	.89	<.0005	31

TABLE 54

Percentages of Agreement on
Identity Status Interview

Judges	Per cent of agreement
A with B	65%
B with C	65%
A with C	65%
Overall per cent of agreement	70%

TABLE 54

Coefficients of Reliability in
Identity Status Interviews among Three Judges

Judges	r	p	N
A with B	.71	$<.0005$	20
B with C	.79	$<.0005$	20
A with C	.77	$<.0005$	20
Average correlation	.76		

NAME_____ AGE_____
       Last   First   Middle Initial

VALUE PROFILE

INSTRUCTIONS (Please read carefully)

       This questionnaire is designed to measure the extent to
which you hold each of several general attitudes or values
about which people in our society have different opinions.

       This is not a test of intelligence or ability. There
are no "right" or "wrong" answers--each person's values differ
from those of other persons in many respects.

       Here is a series of general statements. You are to indi-
cate how much you agree or disagree with them. Record your
opinions in the blank space in front of each item according
to the following scale:

       +1 Slight agreement   -1 Slight disagreement
       +2 Moderate agreement   -2 Moderate disagreement
       +3 Strong agreement   -3 Strong disagreement

       Read each item and decide quickly how you feel about it;
then record the extent of your agreement or disagreement.
Put down your first impressions.

       The test is for research purposes only. Your results
will be kept strictly confidential.

                BE SURE TO ANSWER EVERY QUESTION

____1. I feel capable of handling myself in most social
        situations.

____2. No sane, normal, decent person could ever think of
        hurting a close friend or relative.

____3. If people would talk less and work more, everybody would be better off.

____4. I seldom have fears that my actions will cause my friends to have a low opinion of me.

____5. It doesn't bother me to have to enter a room where other people have already gathered and are talking.

____6. In group discussions I usually feel that my opinions are inferior to those of others in the group.

____7. Every person should have complete faith in some supernatural power whose decisions he obeys without question.

____8. I don't make a very favorable first impression on people.

____9. What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders in whom the people can put their faith.

___10. When confronted with a group of strangers, my first reaction is always one of shyness and inferiority.

___11. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

___12. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.

___13. It is extremely uncomfortable to accidentally go to a formal party in street clothes.

___14. I don't spend much time worrying about what people think of me.

___15. People can be divided into two distinct classes: the weak and the strong.

___16. When in a group, I very rarely express an opinion for fear of being thought ridiculous.

___17. What the youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.

___18. I am never at a loss for words when I am introduced to someone.

___19. Obedience and respect for authority are the most important virtues children should learn.

___20. Science has its place, but there are many important things that can never possibly be understood by the human mind.

CONCEPT-ATTAINMENT TASK

Instructions

In front of you is this chart with 32 different cards. Every one of these cards has 5 different characteristics. The characteristics are listed on this sheet. (hand S "Reminder Sheet") Each card has some shape, some color, some position, quantity, and size. For example, look at card 4. On this card the shape is square, the color is white, the position is left, the quantity is two, and finally the size is small.

As you can see, different cards on the display share different characteristics in common. All of these cards (3-8, 17, 18) share the characteristics "white left." What characteristics do cards 1, 9, 19 share in common? (large, black)

This is how the test will operate. I shall choose 1, 2, or 3 characteristics from your list of 5 (five). I shall not tell you which ones I have chosen. I will have in mind

all of the cards on the display that show that particular
set of characteristics I have chosen. I will point to one
of these cards. The task is for you to tell me, as soon as
possible, which characteristics I have chosen.

You can determine this by finding out which other cards
on the display also contain the characteristics I'm after.
You will point to other cards that you think will help you
and I will tell you whether they are positive or negative.
If I say positive, this means that everything that I have
chosen is on that card as well as on the first card I pointed
to. If the card is negative, this means that not all of
the characteristics I have in mind are on that card. For
example, suppose I chose the characteristics "2 large
circles." If you pointed to any of these cards (7, 15, 19,
27) I would call them positive. If you pointed to any other
cards I would call them negative since no other card contains
exactly "2 large circles."

You can guess what I have in mind any time you want
and as many times as you want. However, let me explain how
your performance will be scored. You are trying to make as
LOW a score as possible. You will be penalized 5 points
every time you ask whether a card is positive or negative;
5 points for every 30 seconds that passes before you guess

the correct answer; and 10 points for every wrong guess. I will turn over a penalty card here on this stand so that you may know at any time the amount of penalties you have accumulated.

Let's go through an example. Suppose I chose the concept "black square." I might point to card 20 as the first positive instance. You're trying to figure out which of the 5 characteristics I have chosen. You might suppose that I had chosen "2 large." To test this hunch, you would ask if card 19 is positive or negative. The card would be called negative and you know that your hunch was wrong. You would also know that the characteristic "square" might be in the answer. Next, you might point to card 21. This card is called positive. What you're trying to figure out is what characteristic does this card share with card 20. You can see that the quantities on the two cards differ. Card 20 has two figures; this card has one. This tells you that "quantity" is not one of the things I have in mind. Size also can't be part of the concept because the figures aren't large on the first card and small on this one. At this point you might guess that I have "black square left" in mind since these are the only characteristics that are common to the positive cards. I would say no. Next you

might choose card 28 to see if position is important. This

card is called positive so you know that position is <u>not</u>

important. You might guess that the answer is "black square"

and you would be right. Remember, however, the answer

might just be one thing such as "black" or "square" by

itself since I can choose 1, 2, or 3, characteristics.

This is how the test works. Do you have any questions?

* *

On first trial - <u>E</u>: "How soon do you hope to solve this
problem? Most people solve it in 3
minutes."

Each trial is conducted until the problem is solved.

After each trial - <u>E</u>: "That took you _____ seconds. How
soon do you hope to solve the next
problem?"

<u>Pilot study only</u>

After the <u>S</u> works exactly 2'30" on problem 8 - <u>E</u>: "I think
you realize that this one is much more difficult
than the other ones. Actually very few people
solve this one, so work on it until you want to
stop."

After 10' - <u>E</u>: "We do have a couple of other things to do.
Can you finish up soon?"

After 12' - <u>E</u>: "I'm afraid we'll have to stop because our
time is getting short."

APPENDIX VIII

REMINDER SHEET

The Five Characteristics

1. Figure

    Square

    Circle

2. Color

    White

    Black

3. Position

    Left

    Right

4. Quantity

    One

    Two

5. Size

    Large

    Small

The Points

      <u>5</u> points off for each request

      <u>5</u> points off for each 30" that passes

      <u>10</u> points off for every wrong guess

The Correct Answer

The correct answer may include 1, 2, or 3 character-istics. Subjects often forget that the experimenter may have <u>less</u> than 3 characteristics in mind.

APPENDIX IX

Subject_____

1. Estimate _____ Time _____
                                              Points_____
        White, small Example: #5 (3,4,5,6,21 Time _____
                                   22,31,32)
        "Nothing - worry - best."   Total _____

2. Estimate _____ Time _____
                                              Points_____
        Left, two   Example: #26 (2,4,6,7,13 Time _____
                                     14,19,26
        "Doing fine - most end up   Total _____
        better than - think -"

3. Estimate _____ Time _____
                                              Points_____
        Circle   Example: #16 (5,6,7,8, Time _____
                                      14,16,17,
        "Harder on self if tense -   18,24,25, Total _____
        relax - just a few."   26,27,29,
                                      30,31,32)

4. Estimate _____ Time _____
                                              Points_____
        Square, black, small   Time _____
                     Example: #20 (19,20,23,
                                    28)   Total _____

5. Estimate _____ Time _____
                                              Points_____
        Black, one, small   Time _____
                     Example: #28 (20,25,28
        "Relax. Do fine"   29)   Total _____

6. Estimate _____   Time _____
                                        Points_____
    Circle, right Example: #32 (16,17,18 Time _____
                                 27,29,30,
    "One - go."   31,32)   Total _____

7. Estimate _____   Time _____
                                        Points_____
    Square, white Example: #13 (3,4,11, Time _____
                                 12,13,15,
    "Promise - secret - thanks." 21,22)   Total _____

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216

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AUTOBIOGRAPHY

I, James Edward Marcia, was born in Cleveland, Ohio,
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in the public schools of Grandview Heights and Upper Arling-
ton, Ohio, and my undergraduate training at Wittenberg
University, which granted me the Bachelor of Arts degree in
1958. From the Ohio State University, I received the Master
of Arts Degree in 1961. I held United States Public Health
Fellowships during my four years at Ohio State, participated
in the Veteran's Administration training program, and served
as a teaching assistant in the Department of Psychology in
the last quarter of my fourth year. During the present
year, while completing requirements for the Doctor of
Philosophy degree, I have been employed as Instructor in
Psychology at Hiram College.

For the coming year, I have accepted a position as
Assistant Professor of Psychology at the State University
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