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EGO IDENTITY STATUS: A LABORATORY STUDY OF THE EFFECTS
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UPON SELF AND PEER EVALUATIONS

DISSERTATION

Presented in Partial Fulfillment of the Requirement for the
Degree of Doctor of Philosophy in the Graduate School of
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* * * * * * * *

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1966

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CHAPTER I

PERSPECTIVES OF THE STUDY

Introduction

In discussing the evolution of social character in this country, Wheelis (1958) describes the kind of identity formation problems many young people seem to be facing.

Nowadays the sense of self is deficient. The questions of adolescence - "Who am I?" "Where am I going?" "What is the meaning of life?" - receive no final answers. Nor can they be laid aside... The period of being uncommitted is longer, the choices with which it terminates more tentative. Personal identity does not become fixed, does not therefore, provide an unchanging vantage point from which to view experience... The hard inner core has in our time become diffuse, elusive, often fluid...

It doesn't fit, it seems alien, as though the unique course of one's life had been determined by untoward accident. Commitments of all kinds - social, vocational, marital, moral - are made more tentatively. Long term goals seem to become progressively less possible (pp. 18-19).

Erik Erikson in recent years has proposed a developmental theory in which the ego passes through a sequence of psychosocial phases of growth leading to the formation of a sense of identity in late adolescence. In the midst of sexual maturity, rapid body growth, and increased social demands, the adolescent must face the task of integrating his childhood identities and values into a new sense of self.
Erikson (1964) calls this period of tumultuous transition to adulthood the **identity crisis**. He aptly describes the nuclear conflict of this adolescent crisis as follows:

Like a trapeze artist, the young person in the middle of vigorous motion must let go of his safe hold on childhood and reach out for a firm grasp on adulthood, depending for a breathless interval on a relatedness between the past and the future, and on the reliability of those he must let go of, and those who will 'receive' him. Whatever combination of drives and defenses, of sublimations and capacities has emerged from the young individual's childhood must now make sense in view of his concrete opportunities in work and in love; what the individual has learned to see in himself must now coincide with the expectations and recognitions which others bestow on him; whatever values have become meaningful to him must now match some universal significance.

Identity formation thus goes beyond the process of identifying oneself with others in the one-way fashion described in earlier psychoanalysis. It is a process based on a heightened cognitive and emotional capacity to let oneself be identified as a circumscribed individual in relation to a predictable universe which transcends the circumstances of childhood. Identity thus is not the sum of childhood identifications, but rather a new combination of old and new identification fragments. For this very reason societies confirm an individual at this time in all kinds of ideological frameworks and assign roles and tasks to him in which he can recognize himself and feel recognized (p. 90).

The attainment of a sense of ego identity later in adolescence, then, rests upon a successful regrouping of childhood identifications into a new adult Gestalt. The adolescent with a stable inner identity has accomplished a redefinition of himself that fits and furthers his
social goals and occupational possibilities. Inner harmony is reflected through his establishment of a positive and reciprocal network of relationships with his society. In short he feels secure in his knowledge of who he is and how he is perceived by others. The individual who resolves the crises of adolescence feels that his style of attacking the problems of adult life are respected variants of those of his peers. Yet his inner sense of a separate identity assures him of a unique distinction as a human being.

When the adolescent falls short of this synthesis of childhood past and future adult commitments he emerges with a diffuse sense of identity, he lacks an inner reference with which to integrate new experience. He depends on others and on varying (or unyielding) interpretations of external events to define his role as a separate person. Confronted with a situation that demands new adaptative changes in behavior style, the diffuse adolescent may respond in an inappropriately unbending fashion, or he may just as easily give himself up to the whims of a strong leader who holds out the opportunity of an identity with something.

Overview of the problem

Erikson's clinical and theoretical formulations about the future preparedness of the individual with a sense of ego identity provides a broad contrast with the role diffuse adolescent pressed to relinquish childhood, but lacking a foothold on adulthood. From this contrast differential inferences can be derived about the social behavior and adaptational style of individuals diverging in their attainment of
an inner identity. In general terms one could infer that the individual secure in his ego identity possesses the confidence and assuredness to appraise himself and others in a realistic and consistent fashion across varying external circumstances. Who he is should remain firm, though how he acts and reacts should hinge on the requirements of his environment. On the other hand it can be inferred that the ego diffuse individual, striving for an inner harmony of self and social role, looks to the outside for assistance in establishing self definition. Lacking an internal basis for self appraisal, it can be predicted that the diffuse individual may alternately define and redefine his self view and his attitude towards others as a function of the demands and rewards immediately available in his environment.

The present study represents an attempt to explore the manner in which individuals, varying in identity attainment, define their sense of worth and accomplishment when confronted with a stress inducing situation that offers little external direction for clarity or success. Of special interest is the level at which the individual chooses to evaluate his personal attributes under conditions of failure at a task presented as indicative of psychological adjustment, yet impossible to solve through personal effort or persistence. Of equal importance is the consistency with which the individual maintains his self regard in the face of externally controlled contradictory inputs and shifts in the intensity of stress.

The focal point of this research is to observe the level and consistency of the individual's personal evaluation in the context of an experimentally controlled laboratory setting where one's peers
visibly undergo the same dilemma of task insolvability. According to Erikson the extent to which the individual perceives his own method of coping as congruent with that of his peers has important consequences in shaping his judgment about them. For this reason the present experimental paradigm includes the addition of a confederate whose appearance and coping style provide a sharp contrast to that of his fellow group members. This accomplice, previously established as a college fringe person, presents to his failing peers an air of indifference about his consistent success.

Using Erikson's theoretical framework some untested inferences will be drawn about the manner in which individuals varying in terms of their resolution of the identity crisis function in a stress engendering group. The issues of central concern in this study are the level and consistency of one's evaluation of self and an out-group confederate under varying conditions of stress at a group oriented problem offering no rational basis for solution. To a large degree what is being attempted here is the verification of these issues as parameters relevant to the construct of ego identity. The central focus of this research is to develop a new laboratory situation and methodology appropriate for the experimental investigation of these parameters. Since the research literature provides few empirical referents for the ego identity construct, and no data relating ego identity to the issues under investigation, the present study is of necessity exploratory in its aim.

The ego identity construct, from which this study draws its
experimental hypotheses, is rooted in Erikson's more general theory of psychosocial development. In order to locate these hypotheses in the context of that theory, a summary of Erikson's developmental concepts will be presented.

**The Psychosocial Theory of Erikson**

Erikson's (1963) central contribution to ego psychology was to formulate and detail a psychosocial theory of autonomous ego development, a development that went beyond genital maturity to cover the entire life cycle.

**The epigenetic approach**

This fundamental postulate asserts that the developing organism goes through a genetic sequence of psychosocial developmental phases which begins at birth and continues on into old age. The blueprint or the basic pattern of development is biologically determined. However, the outcome of each phase rests on the nature of the relationships between the evolving individual and his social environment—at each level of his maturation.

Each phase of development includes a particular body zone with its coordinated mode of interaction with the environment. These zones and modes parallel Freud's psychosexual stages but go beyond genital maturity to cover the entire life cycle (see Chart A below). The epigenetic growth of the ego at each phase of development implies a set of physical, social, and psychological potentialities for interaction with the environment, and each phase-specific set determines
the context for the succeeding phases of development. In a fashion similar to Freud's psychosexual model, the particular zone and mode that is active in any phase dominates the individual's behavior.

Erikson (1963) is careful to point out that the time of occurrence of each developmental phase, the form of behavior exhibited during that phase, and the type of developmental solutions all vary with the values and demands of particular cultures.

For Erikson, then, structural maturation is but one necessary condition for development, while certain forms of social structure and environmental stimulation provide the sufficient conditions for the normal development of subsequent ego skills. Two lines of research can be interpreted as offering support for the epigenetic postulate. A large group of writers (cf., Levine, 1962; Lorenz, 1952) have formulated a "critical period hypothesis" to explain, at least in animals, the profound effects of infantile experience on later development. This hypothesis states that there are "specific periods in ontogeny during which the organism is particularly sensitive to certain types of stimulation which shape its subsequent behavior," (Levine, p. 143).

Several developmental psychologists (cf., Munn, 1955; McGraw, 1935) have found that the development of locomotor and language skills, for example, evolve as a function of genetically controlled rates of structure maturation. Given a normal unfolding of such mechanisms, the organism's social milieu interacts to shape and determine the degree of adaptiveness and level of skill of the behavior exhibited at various points in the developmental sequence.
The concept of mutuality

The concept of mutuality sets the stage for a theory of psychosocial development. There is said to be a mutuality or cogwheeling of the growing individual and the demands of his society. Thus the individual is neither transformed into a social being by society, nor does he transform society into a particular structure—both form a mutual unity.

As Marcia (1964) has expressed it:

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 (pp. 10-11).

Psychosocial stages

The theory of psychosocial stages has been alluded to in the discussion on epigenesis. The epigenetic plan includes a series of growth phases of the ego in which solutions to problems peculiar to each phase depend upon the kind of achievement attained in previous stages.

Erikson has segmented the life cycle into eight overlapping psychosocial phases. Each phase has a specific set of developmental tasks that must be solved within it. These tasks, depending on cultural variations, usually reach their peak of intensity during an age phase; for this reason they are referred to as crises and are said to be phase-specific.

Below is a rearranged and modified schema of Erikson's
(1959, p. 166) eight psychosocial crises, the age period in which they usually occur, their related physical (psychosexual) zones, and social mode:

**CHART A**

**PSYCHOSOCIAL DEVELOPMENT THROUGHOUT THE LIFE CYCLE**

<table>
<thead>
<tr>
<th>Age Period</th>
<th>Psychosexual Stage</th>
<th>Psychosocial Crises</th>
<th>Psychosocial Modalities</th>
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<tr>
<td>I. Infancy</td>
<td>Oral</td>
<td>Basic Trust vs. Mistrust</td>
<td>To get To give in return</td>
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<tr>
<td>II. Early Child.</td>
<td>Anal</td>
<td>Autonomy vs. Shame, Doubt</td>
<td>To hold (on) To let (go)</td>
</tr>
<tr>
<td>III. Play Age</td>
<td>Phallic</td>
<td>Initiative vs. Guilt</td>
<td>To make (=going after) To &quot;make like&quot; (=playing)</td>
</tr>
<tr>
<td>IV. School Age</td>
<td>Latency</td>
<td>Industry vs. Inferiority</td>
<td>To make things (=completing) To make things together</td>
</tr>
<tr>
<td>V. Adolescence</td>
<td>Puberty</td>
<td>Identity vs. Diffusion</td>
<td>To be oneself (or not to be) To share being oneself</td>
</tr>
<tr>
<td>VI. Young Adult</td>
<td>Genitality</td>
<td>Intimacy vs. Isolation</td>
<td>To lose and find oneself in another</td>
</tr>
<tr>
<td>VII. Adulthood</td>
<td></td>
<td>Generativity vs. Stagnation</td>
<td>To make be To take care of</td>
</tr>
<tr>
<td>VIII. Maturity</td>
<td></td>
<td>Integrity vs. Despair</td>
<td>To be, through having been To face not being</td>
</tr>
</tbody>
</table>
The labels given each crisis denotes the extreme polar solutions of the nuclear conflict faced at each phase of development. In effect, though, the resolution however rests somewhere on the continuum between these polar outcomes. Unresolved aspects of prior crises re-occur in later stages and become an integral part of those later crises.

**Ego identity vs. identity diffusion**

Erikson (1959) describes the psychosocial task of the adolescent as a crisis of self syntheses and integration:

Youth begins. But in puberty and adolescence all sameness and continuities relied on earlier are questioned again because of a rapidity of body growth which equals that of early childhood and because of the entirely new addition of physical genital maturity. The growing and developing young people... are now primarily concerned with attempts at consolidating their social roles. They are sometimes... preoccupied with what they appear to be in the eyes of others as compared with what they feel they are and with the question of how to connect the earlier cultivated roles and skills with the ideal prototypes of the day.

The integration now taking place in the form of ego identity is more than the sum of the 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 endowments and his opportunities. In psychoanalysis we ascribe such successful alignments to 'ego synthesis' (p. 89).

Equipped with a sense of ego identity the adolescent can face the turmoil of encroaching adulthood with a stable inner locus of
self definition. The ego diffuse individual, however, must subordinate the tasks of adult life to a continued quest for an inner reference point from which to consolidate varying self images.

Now that the concept of ego identity has been presented in its theoretical perspective, we turn to the issue of its utility as a generator of research.

Review of Previous Research on Ego Identity

Although ego identity has been discussed and utilized since its inception by an increasing number of clinicians, social critics, and personality theorists, very few studies have been undertaken to measure and validate the construct. This is no doubt due in large part to the great difficulty of tying down operationally the behavioral and social referents of such a broad and complex developmental construct.

The present writer has been able to locate only eight published studies that attempt to deal directly with Eriksonian concepts related to ego identity. Six of these writers seem to have abstracted quite narrow, though converging aspects of the construct; these six studies will be briefly outlined and then followed by a short critique.

Bronson (1959) operationally defined ego identity as "temporal stability of self rating" and the "certainty of self conception." Both measures employed a semantic differential technique. His validation criteria consisted of a structured interview designed to elicit information about "continuity with the past" and "freedom from anxiety." With a sample of 18 college Ss (mostly females) he obtained a set of significant intercorrelations.
Gruen (1960) employed a Q-sort measure of ego identity which was defined as the discrepancy between real and ideal self. A 14 item questionnaire served as an additional criterion measure. Degree of acceptance of a fake personality sketch served as the dependent variable. The questionnaire method yielded a low correlation with the dependent variable. Ss with high real-ideal self discrepancy on the Q-sort accepted significantly more fake personality descriptions than did the low discrepancy Ss.

Block's (1961) referent for ego identity was "role variability" which was arrived at by having Ss rank a set of 20 adjectives eight times to characterize their behavior with eight "relevant others." Factor analysis of the rankings were used to establish a role rigid and a role diffuse group. Role variability scores for both groups were correlated with a California Personality Inventory measure of susceptibility to anxiety. Though Block predicted a curvilinear relationship (i.e., extreme rigid and diffuse Ss being most anxious), he found that role rigid Ss were least susceptible while role diffuse Ss were most susceptible to anxiety. Block assumed this unexpected finding (a linear relationship) resulted from a college population devoid of extremely role rigid Ss.

Howard and Kubis (1964) related a 50 item ego identity questionnaire to three aspects of personal adjustment; (1) Taylor Manifest Anxiety Scale, (2) a manifest hostility scale, and (3) a mother-daughter problem check list. The validity criterion of the questionnaire were correlations of .34 and .60 for freshmen and sophomore
women respectively with a Rating Scale for Identity Traits. They obtained a significant negative correlation between the ego identity scale and the anxiety measure. These writers hypothesized that according to Erikson a congruence of self images (ego identity) should lead to less inner tension and anxiety.

Rasmussen (1964) devised a 72 item ego identity scale (four items for each of the first six psychosocial stages) by almost literally transferring some of Erikson's theoretical statements into test items. He found that this scale significantly discriminated a group of Navy recruits who adjusted well to the training program from a group who adjusted poorly. The ego identity scale also correlated with a Self Acceptance Check List.

Heilbrun (1964) used Block's (1961) ranking procedure to obtain a perceived social role consistency (RC) index of ego identity. He found that adolescent males who conformed to cultural stereotypes of masculinity had higher RC scores than did less masculine males. High and low feminine girls had higher RC scores than moderately feminine girls. In a follow up study Heilbrun got a significant correlation between the RC scale and a measure of test taking defensiveness.

Four of the writers cited focused on a very narrow dimension of the ego identity construct. Bronson, Gruen, Block, and Heilbrun elected to view ego identity in terms of self concept or role stability over time or across test-derived situations. This focus leaves untapped at least three crucial referents of Erikson's concept. No attempt was made to evaluate behavior associated with earlier psycho-
social phases of development. As was pointed out earlier, these behaviors contribute heavily to the form and intensity of the ego identity crisis. Secondly, the bi-polar continuum, along which each developmental crisis ranges, was disregarded in favor of a more dichotomous ego identity classification. Finally, these studies ignored the important adolescent tasks of occupational commitment and the formation of an initial ideology.

Another central criticism relates to the manner in which the criterion measures were validated. For the most part these scales were either validated against interview or other test measures of adjustment vs. maladjustment (e.g., anxiety, hostility, defensiveness). In Rasmussen's study the criterion was adjustment to a Navy program. While it is reasonable to assume that the ego diffuse adolescent experiences conflict and anxiety, unless the conditions under which these problems occur are specified according to the construct, we may be left with one more set of general maladjustment measures.

As stated above, these writers utilized a general adjustment index either in validating criterion measures, as dependent variables, or in both cases. This approach departs from Erikson in that it centers on intrapsychic processes rather than on social adaptation.

**Broader criterion measures of ego identity and their adaptation to the present study**

The following studies are treated separately because they contain much broader operational conceptions of the ego identity con-
struct and are derived more directly from Eriksonian theory. Furthermore, both of the studies to be cited involve a more elaborate attempt to validate their criterion measures, therefore both measures will be utilized in the present study as a basis of defining ego identity status.

Marcia (1964) developed a semi-structured Identity Status Interview in order to categorize and measure four styles (Identity Statuses) of meeting the identity crisis. These statuses (Identity Achievement, Foreclosure, Moratorium, Identity Diffusion) were hypothesized to fall on a continuum from identity to diffusion.

As an overall measure of ego identity Marcia developed the Ego Identity-Incomplete Sentences Blank (EI-ISB). This scale was designed in part to elicit and score information relative to crisis and commitment in the areas of occupation, religion, and politics. Using a group of 86 college males, Marcia obtained a significant correlation between the EI-ISB, the Identity Achievement Status, and a pre-experimental self esteem measure. However this scale failed to predict to the dependent variable of, for example, pre and post self esteem scores following either a positive or negative invalidated self-definition under stress. An analysis of the stress manipulations suggested that they may have actually decreased stress in some instances during the experimental situation.

Marcia found that Identity Achievement Status Ss were superior on all measures to the Identity Diffusion Status. His data indicated that Ss high in Identity Status perform better on a stressful concept
attainment task and that Identity Status increases with year in college.
In concluding his study Marcia suggested that further work with the ego
identity construct should include a refined design to adequately test
the change in self-esteem hypothesis.

The last studies to be considered are those by Henry (1965) and
Hess, Sims, and Henry (1962). These writers defined on an a priori
basis a criterion occupational group of ego diffuse people. They
reasoned that professional actors as a group were drawn into acting
because of their own identity problems and that the process of acting
enabled them to temporarily achieve a feeling of ego identity. Hess,
Sims, and Henry summarized their central theoretical assumption by
stating that

the social role of the professional actor
provides a culturally approved and
permanent psychosocial moratorium for the
identity diffuse, within which they can
continuously seek and temporarily find
an artificial identity (or stage role)
via an artificial process (acting)
(1962, p. 4).

Their next step was to develop a measure of ego identity. This
measure would have to both meet the requirements of the theory and
discriminate actors from non-actor groups who, a priori, were thought
to be on the ego identity side of the continuum.

Hess, Sims, and Henry described their scale, Identity Scale (IS),
as follows:

In essence this instrument is a semantic
differential composed of 56 pairs of
words or phrases designed to elicit re-
sponses relevant to the issue of identity.
One item of each pair denotes the positive possibility of a psychosocial developmental issue, the other, the negative. All of Erikson's eight developmental stages constituted sources of items, since as he points out, the derivatives or precursors of the issues defining each stage "... are part and parcel of the struggle for identity" (p. 5).

As a measure of identity and identity diffusion independent of the IS, the current behavior of a group of actors was assessed in a series of elaborate interviews. There was high agreement between the IS and the rated interviews for several groups of actors.

Since they did not wish to compare actors with occupations per se, several non-actor groups were used in an attempt to cancel out the possible occupational biases of any one group. Therefore the IS was administered to 500 men and women (factors were derived separately for sex) associated with such occupations as nursing, teaching, executive, and housewife.

The hypotheses tested and confirmed were these: (1) Actors, as a group will manifest more identity diffusion than other comparable groups. (2) Actors, as a group, will manifest an increase in identity as they move through rehearsal to performance.

The mean scores for actor groups were in all cases significantly lower (more diffuse) than any other single or combined comparison groups. One main factor ("ego identity") from the IS accounted for the major discriminative validity. Other factors appeared to reflect Erikson's stages of Basic Trust, Integrity, and Autonomy. There was a significant negative correlation between success on stage and ego
diffusion (diffusion predicts success), and student actors were more diffuse than professionals.

In summary, both the IS and Marcia's EI-ISB were specifically developed as overall measures of ego identity. However the EI-ISB placed little emphasis on eliciting behavior from the psychosocial stages leading to the adolescent identity crisis. Nor did this scale provide a standardized format for the expression of attitudes and feelings related to specific earlier psychosocial issues. The IS, on the other hand, was designed to elicit just such data. For example, the IS item pair "trusting of other people vs. on my guard with others" not only elicits a response relevant to Erikson's first developmental phase, but it allows S to state the degree to which he feels that way. The IS, however, is negligent in obtaining data relating to the impact of the identity crisis (or its avoidance) and the type of commitment in the areas of religion, politics, and occupation. Marcia's scale was designed in part to elicit such information. For these reasons the present writer felt that both scales together provided a more complete, more theoretically logical, way of assessing ego identity as an independent variable.

The Development of Experimental Hypotheses

In the literature review it was noted that much of the research was concerned with two central aspects of ego identity—the consistency and stability of the individual's self concept and his social roles. These identity related issues are relevant to Erikson's
theoretical assumption that underlying the development of a sense of ego identity is a sense of continuity with past and future, as well as an inner feeling of selfsameness across varied life experiences.

While the present study is concerned with self and role stability, it differs significantly from previous research in its attempt to observe these variables in a controlled social group context. Erikson and others are explicit in their view that adolescents utilize peer groups as a kind of sounding board against which to evaluate the congruence between their own definition of self and values and those of the outside world.

In order to observe the differential effects of high and low ego identity Ss in a group context, the first requirement is to secure a valid means by which Ss can be classified as to ego identity status.

The criterion measures of ego identity

The choice of criterion measures for the operational definition of the independent variable is based on two considerations. First the measures should be derived directly from the ego identity construct, for part of this study will serve to test the construct validity of those measures. Secondly the measures must incorporate broad aspects of the construct in its scope, since the aim here is to classify Ss according to ego identity status, not simply role variability or self consistency.

In combination the IS and the EI-ISB appear to offer the most promise of fulfilling this requirement. Both scales, as noted above, were derived from the theoretical network which underpins the ego
identity construct, and both were developed and partially validated to serve as overall measures of the construct. Their special relevance to the present study is that together they might provide an assessment of the psychosocial antecedents (pre-ego identity crisis outcomes) leading to the college era, as well as the manner in which identity crises are currently being handled by the college students.

These overlapping criterion referents would seem to meet the operational requirements for classifying Ss as to high or low ego identity status. That is, if a S has been relatively unsuccessful in resolving the phase-specific issues prior to adolescence, and if he has been relatively incapable of coping with such current identity-related issues as career and adult social role commitments, this would be a theoretically sound basis for placing him on the ego diffuse end of the continuum.

The college moratorium and ego identity

One of the purposes of this study is to trace the development of the ego identity process through the four years of college. This aim has two goals. First, a significant progression of ego identity status through college would serve as an important construct validity indicant of the criterion measures. If a valid means of assessing ego identity has been obtained then the measures which operationally define the construct should reflect a progressive increase in identity formation as one moves through the college moratorium towards full adult status.

In our middle class culture, with its emphasis on extended
apprenticeship and professional education, many adolescents are given institutional consent to put off the solution to the identity crisis during the training period. Erikson (1963) calls this period of delay and consolidation a psychosocial moratorium.

During the college moratorium the individual can direct his energy toward trying out various ideologies, occupational roles, and styles of sexual conduct. He is temporarily suspended from the responsibilities of establishing a final career status or supporting a family. At the same time the student is under considerable pressure to abandon childhood values and the beliefs of his parents in order to define a new, more independent sense of purpose and status in relation to his college milieu. Super (1957) has stated that locating a place in the world of work or college has an important bearing on implementing, refining, and extending one's self concept. Erikson (1963) has emphasized that "it is the inability to settle on an occupational identity which disturbs young people" (p. 252).

A study by Beardslee and O'Dowd (1962) at Wesleyan suggests that a student is allowed to share in a system of beliefs and values associated with a particular field and the people in that field once he has indicated his intention to enter that field. These writers, in another context, have stated a related point of view:

The fact that students perceive occupations largely in terms of their implications for a style of life and a place in the community status system... constitutes pressure on that student to select an occupation early and to cling to it (p. 607).

The inference to be drawn from this formulation of the college
The utilization of peer groups by the individual is not meant to imply an adolescent drive towards sameness with others. According
to Erikson the adolescent seeks an inner assurance that his sense of a separate identity is recognized, accepted, and understood by those significant others. The adolescent quest, then, is for both an effective style of adapting to encroaching adulthood, and a desire to sense that one's style meshes with the problems and the problem solving style of peers who, in the eyes of the adolescent, stand for society. Erikson (1959) summarizes this point as follows:

The sense of ego identity, then, is the accrued confidence that one's ability to maintain inner sameness and continuity is matched by the same-ness and continuity of one's meaning for others... that his individual way of mastering experience is a successful variant of the way other people around him master experience and recognize such mastering (p. 89).

The main question to be raised here is what self evaluative response can we expect when a _S_ has no external cues to enable him to determine whether or not his style of mastering an unsolvable problem is congruent with that of his peer group. In the remainder of this section we will attempt to develop a theoretical and empirical rationale for formulating hypotheses about this question.

In the present study _S_s are exposed to three types of experimental manipulations: (1) lowered self esteem based on a negative interpretation of pre-experimental "personality tests," (2) exposure to a relatively meaningless "subliminal" group task which offers no basis for improved performance, and (3) a systematically varied reinforcement contingency.

Erikson (1959, 1963) repeatedly asserts that the capacity to maintain an internally based self definition across varying situa-
tional pressures is one of the most adaptive aspects of ego identity achievement. It follows that the individual who knows from the inside who he is and how he differs from others should be less influenced by external attempts to artificially challenge (positively or negatively) his sense of self.

These inferences drawn from Erikson's theory of ego identity, lead to the following general hypotheses. Lacking an internally consistent and stable system of self reference with which to adapt to an ill-defined and frustrating situation, the ego diffuse S should be more influenced by the external manipulations of lowered self esteem and the differential reinforcement operations. It is assumed that he will focus on the provided external cues of success and failure and shift his perception of self accordingly.

On the other hand those Ss who have achieved ego identity will presumably adapt more appropriately to the imposed conditions. They should view the conditions as transient, incongruent, and situationally-tied, rather than as a series of events severe enough to challenge their perceptions of self.

Two earlier studies, in this regard, provide some relevant empirical data. Gruen (1960) has shown that Ss with highly discrepant self concepts tend to accept fake personality descriptions to a greater extent than Ss with more congruent self views. Carrier (1963) has found that one could predict a S's "gullibility" from his need for direction and leadership from outside sources. In addition, cognitive dissonance research (Festinger, 1957) has shown that Ss
with varying attitudes towards their self concept are more amenable to unrealistic communication imput and thus to attitude change.

The evaluation of an outgroup confederate

What can be anticipated about the response of Ss to a group member (the confederate) who is set to appear successful, while others fail, and who is unconcerned about the plight of the group? The following quote from Erikson (1959) concerning the conflicts of the acutely diffuse adolescent bears directly on this question:

To keep themselves together they temporarily overidentify, to the point of apparent complete loss of identity, with the heroes of cliques and crowds. On the other hand, they become remarkably clannish, intolerant, and cruel in their exclusion of others who are 'different' in skin color or cultural background, in tastes and gifts, and often in entirely petty aspects of dress and gesture arbitrarily selected as the sign of an in-grouper or outgrouper. It is important to understand such intolerance as the necessary defense against a sense of identity diffusion... Adolescents help one another temporarily through such discomforts by forming cliques and by stereotyping themselves, their ideals, and their enemies (p. 92).

In brief, therefore, the ego diffuse individual should consign the confederate to an outgroup status in order to make him a more plausible target for the attribution of his own self doubts and failure in the experiment. By so doing the individual enhances his own feeling of sameness with the peer group and thus defends against increased discontinuity within the context of a situation which leaves him dislodged from the usual external guidelines for success and mastery.
Several writers (e.g., Bettelheim and Janowitz, 1950) have, in this regard, found that threat to one's self attributes is not uncommonly projected toward dislike outgroup members.

In summary, three major experimental hypotheses have been advanced regarding the manner in which ego identity as opposed to ego diffuse individuals evaluate themselves and an unconventional confederate in a stress inducing group situation which provides no rational means for success at the experimental tasks. In addition, a new laboratory situation and related methodology have been proposed as a basis for experimentally testing the hypotheses.
CHAPTER II

HYPOTHESES

Self Rating Scale Hypotheses

Erikson's conceptualization of the ego diffuse individual as fluidly sensitive to external evaluative cues in establishing his personal worth and identity, and of the identity-achieved individual as better able to rely on long-standing, socially reinforced, internal standards of self judgment serves as the basis for the present hypotheses. In general, these hypotheses are as follows: Individuals with a secure sense of ego identity will be less influenced by external attempts to lower their self-esteem than will ego diffuse individuals in a stress-inducing situation. Rather, they will evaluate themselves in a manner more closely in keeping with their characteristic, pre-experimental self views. And once they arrive at a level of self-evaluation in the experiment, they will feel relatively little pressure to vary those self-perceptions as a function of systematically-varied reinforcement operations within the situation.

These general hypotheses can be stated in more specific terms as follows:
Self Rating Scale predictions

1. The mean of the three repeated Self Rating Scale scores for the high ego identity subjects will be significantly higher than the comparably combined mean for low ego identity subjects.

2. The Self Rating Scale scores obtained under the three reinforcement conditions will deviate from the pre-experimentally obtained Self Rating Scale basal measure less for the high ego identity than the low ego identity subjects.

3. The Self Rating Scale scores will increase under positive reinforcement and decrease under negative reinforcement to a greater degree for low ego identity than high ego identity subjects.

Confederate Rating Scale

Erikson's conceptualization of the manner in which the ego diffuse regard other individuals under conditions of stress and repeated failure provides the framework for the following general hypotheses. Low ego identity subjects, as opposed to high ego identity subjects, will consign an unconventional group member to outgroup status in order to make him a more plausible target for the projection of their own mounting sense of inadequacy and failure. Thus, by contrast with this outgroup member, their own role diffuseness within the situation has temporarily been attenuated and minimized through a process of banning together against this outgroup member or, in other words, through the redefinition and reinstatement of a new "ingroup" role.
These general hypotheses can be stated in more specific terms as follows:

**Confederate Rating Scale predictions**

4. The mean of the three repeated Confederate Rating Scale scores for high ego identity subjects will be significantly higher than the combined mean for low ego identity subjects.

5. Confederate Rating Scale score means will increase under positive reinforcement and decrease under negative reinforcement to a greater degree for low ego identity subjects.

6. The Confederate Rating Scale scores obtained under positive and negative reinforcement will deviate less from the Confederate Rating Scale scores under no reinforcement for high ego identity subjects.

**Control Group Hypotheses**

Faced with easily mastered tasks as well as the absence of the experimental effects, including the experimental role of the confederate, one would expect the control group Ss to be fairly consistent in their dependent variable scores. In order to examine the stability of these measures and the effect of the experimental conditions, a control group was utilized. We would expect the control group to rate themselves and the confederate fairly high because of the relatively relaxed, success-laden atmosphere of the control situation.
Control Group predictions

7. There will be no differences among the means of the three repeated Self Rating Scale scores, the Self Rating Scale basal score, and the Confederate Rating Scale score.

8. Control Group subjects will score significantly higher on the Self Rating Scale and Confederate Rating Scale than Group A or Group B.

Hypotheses Relating to Year in College

In the light of the previous discussion of ego identity theory, one would expect the newer, less socialized college student to be more intensely confronted with identity formation conflicts than the more advanced, more acclimated student. The successful resolution of adolescent identity crises in college should lead to a progressive increase in the capacity to meet the increasingly adult demands of later college years. One such demand is for the early establishment of a major area of study.

Thus the general hypothesis here is that ego identity status should show an increase from the first to the last year in college.

Developmental predictions

9. There will be a progressive increase in Identity Scale score as a function of the subject's year in college.

10. There will be a progressive increase in Ego Identity-Incomplete Sentences Blank score as a function of the subject's year in college.
11. For Group A, subjects who are able to indicate a preference for a college major will score higher on the Identity Scale and the Ego Identity-Incomplete Sentences Blank than subjects unable to state a major.
CHAPTER III

METHOD

Subjects

Selection rationale

Two related criteria were associated with subject selection. First it was necessary to locate populations of college males that contained a good distribution of Ss along the ego identity-identity diffusion continuum. Secondly, in order to compare the identity process of relatively new "unsocialized" students with thoroughly indoctrinated advanced students, two populations were required. For the younger population (Group A) it was desirable to locate students who were not yet tied to a particular occupation and who were close enough to the adolescent years in age so that the identity crises of which Erikson speaks was still at issue. Group A, then, would represent relatively uncommitted students newly entering the psychosocial moratorium of the college process. The older group (Group B) was to represent advanced students, more or less committed to a major area of study. With two such groups it was thought possible to investigate some developmental changes in identity-related behavior.
Description of Group A

This group consisted of males enrolled in several sections of a course at The Ohio State University entitled Psychology of Effective Student Adjustment. A recent survey (Instructor's Handbook, 1965) showed that students enrolled in this course were 70 percent freshmen with a median age of 18. They tend to be roughly distributed in proportion to the University's norms for sex and college membership. The Handbook described this class as a "developmental course for students capable of meeting university standards but not doing so." What seemed to distinguish these students as a group were their problems in adjusting to the college life of working effectively and formulating ideas about future goals.

The 40 male Ss of Group A were recruited from six sections of the course on a voluntary basis. Only two students of the total number contacted refused to participate. They were told in class that the study related to "personality factors, such as social sensitivity, and the ability to perform group subliminal perception tasks." This was followed by a brief discussion about the relevance of subliminal perception in scientific psychology. Upon completion of the study they were informed of the purpose and results of the study; these group discussions also served as final debriefing sessions.

Description of Group B

This group consisted of junior and senior males (mostly psychology majors) enrolled in Psychology of Abnormal Behavior. Parti-
cipation in the study was made a course requirement. Discussions with faculty members currently teaching this course led to the following description of the students. Many of the students were actively engaged in staking out claims as to their own identities and future commitments. Though they were sophisticated about college life, several students showed an interest in learning about behavior problems in general, and their own conflicts in particular. The study was introduced in the same manner as for Group A. At the end of the study all participants were given a mimeographed hand-out which described the purpose and results as well as serving as a final debriefing.

**High vs. low ego identity classification**

As already mentioned, since both criterion measures focused on different, though overlapping, aspects of the construct, it was felt that a combination of these two measures would serve as a better assessment of the overall ego identity construct. Therefore, a student was selected as a S if both his EI-ISB and IS scores were above or below the median of his respective group. That is, score distributions and median splits were accomplished separately for Group A and for Group B. If both scores were above the median the S was designated as high ego identity; if both scores fell below the median he was labeled low ego identity (ego diffuse). As a result of this selection method, thirteen students from Group A and ten students from Group B were dropped from the study after the initial testing.
**Independent Variable Measures**

**Identity Scale**

The theoretical rationale and validation research were previously discussed. This scale, consisting of 56 pairs of words or phrases in a seven point semantic differential form, asks the S to judge "himself as he really is." Each item pair was designed to elicit responses relevant to either positive or negative outcomes to Erikson's phase-specific developmental issues, including the ego identity phase.

For each item pair, Ss had to first decide which pole (word or phrase) more appropriately described him; he then decided the degree to which he felt that way on a seven point scale. A "very much" endorsement of the positive pole earned seven points, and a "very much" endorsement of the negative pole earned one point. The score used for selection criteria was the raw score on the ego identity factor. The IS along with its identity factor items and scoring procedures are in Appendixes A and B respectively.

**Ego Identity-Incomplete Sentences Blank**

The theoretical rationale and validity criteria of this scale have already been mentioned. Briefly, this instrument is made up of 25 stems (leading phrases) which S uses as a base to form complete sentences expressing his "real feelings." Marcia (1964) selected stems (Appendix C) and developed a scoring Manual designed to sample and score certain crisis and commitment behaviors that Erikson suggests are important in the achievement of ego identity.
Each completed sentence is scored 3, 2, or 1 depending on the degree to which the response is indicative of identity achievement. The Manual gives explicit scoring criteria along with illustrative examples of each level of scoring. For example, the completion of the stem "If one commits oneself..." is scored in the following manner:

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

2 points - "Theme still remains, some loopholes or dubious endorsement of the principle, or cautiousness."

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

Reliability data for the EI-ISB scoring yielded an average correlation among three judges on item-by-item analysis of \( r = .76 \) (\( p < .0005 \), N of items = 440); the correlation of total EI-ISB scores for a sample of 31 Ss was \( r = .90 \) (\( p < .0005 \)). Marcia reports a non-significant correlation (\( r = .15 \), N = 86) between EI-ISB and IQ scores.

In the present study the average correlation among three advanced clinical student judges (including the writer) of total EI-ISB scores for ten randomly selected protocols was \( r = .88 \) (\( p < .001 \)).

Measurement of Dependent Variables

Self Rating Scale (SRS)

This scale was designed to assess S's current feelings about his style of functioning as a member of a peer group. One important requirement of item selection was the extent to which they could be
easily related by Ss to the immediate experimental situation: tasks, level of confidence about task solution, peer group role, congruence of self and others in the experiment, and current emotional states. On the other hand because of time pressures during the experiment, and due to the repeated presentation of this scale, it had to be brief, simple, and require a minimum of writing or thinking. This last point was also deemed desirable in that Ss had little need to ponder over their responses. It was felt that immediate responses were better indicators of current attitudes.

This scale consists of twelve pairs of words or phrases selected to sample (1) feeling states during the experiment (e.g., tense vs. relaxed), (2) evaluation of experimental task effectiveness (e.g., creative vs. conventional), (3) some broad personality traits (e.g., dependent vs. independent), and (4) the degree to which S feels he is himself in the experiment (e.g., unlike others here vs. like others here). The SRS was presented with the instructions "We'd like you to judge yourself as you really are."

Since the SRS was administered three different times during the experiment, items were also selected on the basis of their potential to be changed upon repeated presentation. Thus, for example, it was assumed that an item such as "doubtful vs. confident" could be responded to differentially over time as a function of change in the S's perception of his confidence level as he faced new tasks with different reinforcement feedback.

All of the individual items were either drawn from or closely followed those used in the Gough Adjective Check List (1952). How-
ever they were put into a bipolar form and presented in the same seven point format as the IS. Like the IS each item score ranged from seven to one; the total score could range from 84 to 12.

While no published studies could be found in which the Adjective Check List was given at various points during an experiment, Gough's scale has been shown to significantly reflect predicted self rating changes in pre - post experimental designs. In a variety of studies, including lowered self esteem manipulations, the Adjective Check List was found to vary in a predicted manner (Gough 1955).

To further insure that the items selected would allow $S$ to change his self ratings without feeling overly inconsistent, the order of item presentation and the polar arrangement of each pair were reversed with each of the three presentations of the SRS. These three forms of the SRS can be found in Appendix D; the scoring procedure for the SRS is in Appendix E.

**Confederate Rating Scale (CRS)**

Like the SRS this scale is made up of twelve seven point pairs of words or phrases adapted from the Adjective Check List. It was presented with the instructions to judge a specified member of the experimental group "as he really appears to me now." In effect each group member rated the same confederate. The order of item presentation and the polar arrangement of each pair was rotated with each of the three repeated administrations (Appendix F). The scoring procedure for the CRS is in Appendix G.
The items were chosen in part to give Ss an opportunity to express an extremely negative or prejudicial attitude toward the confederate. That is, during the experiment the confederate's behavior presumably did not objectively warrant such harsh judgment as the scale items, "prudish" or "distrustful." Other items were selected to enable the Ss to evaluate the confederate's (1) task effectiveness (e.g., imaginative vs. unimaginative), and (2) his general behavior style as a group member (e.g., tactless vs. tactful).

The Use of a Confederate

According to Erikson (1959) under the threat of loss of self esteem there is a tendency for ego diffuse individuals to band together psychologically, to identify themselves as a clique, in order to counter the fears of anticipated further loss of identity. Erikson calls this a "defense against a sense of identity diffusion." In such a group situation, especially when it is a relatively new or ill defined one, Erikson (1959) says the members become "remarkably clan-nish, intolerant, and cruel in their exclusion of others who are 'different' ... in cultural background ... tastes and gifts." These different others are given the status of out-groupers while the rest of the group strive to become more of a feather.

It was our intention to place just such a "different" outsider--the confederate--in each of the experimental groups. He was to be a college student, but somewhat unlike the usual middle class college students in dress and manner. Where others presumably
were anxiously attending, he was bored and aloof; when others repeatedly failed, he was remarkably successful.

The confederate, a twenty-one year-old undergraduate student, was trained to affect the role of an atypical, though plausible looking student—the kind of person who is not uncommonly found among college fringe groups. In the writer's experience, students are confronted by this sort of individual daily, but rarely does the typical college student get to know him on a personal basis.

The main purpose of using such a confederate was to present a student who was visibly plausible as a part of the college scene, but who could not rationally be given such extreme attributes as hostile or threatening. Thus the purpose here was to place such a fringe character in the peer groups who was sufficiently outside the intimate experience of the Ss to enable them to define his role and personal attributes as a function of their attitudes toward him during the experiment. That is, if one were so inclined to single out a member of the group as different, and as a target for projection, the confederate would be a likely candidate.

The confederate was a student at Ohio State who posed as a member of all groups. Both Group A and Group B classes were either too large or had too many sections for the confederate to be recognized as a non-class member. In fact, several Ss did not know one another when they met in groups.

In overall appearance he was rather disheveled and carelessly groomed—as if he paid little attention to style or neatness. He was
overdo for a haircut, yet his hair did not affect any particular "style," e.g., beatle or beat. He wore rather soiled tan levis, army surplus fatigue jacket, and boots. Whenever he was not directly involved in the experiment he "tuned out" the rest of the group by reading a book or magazine.

His general manner was one of indifference, yet his casualness could be interpreted as aloof or cool. The intention was to affect an air of bored self assurance. In short, his attitude was to convey the message that he "knew what was happening," yet was unconcerned, even bored.

The confederate met with the writer and a graduate student with some "directing" experience for eight hour-and-a-half training sessions. Afterwards he performed his role before a group of five clinical students who evaluated his appearance and performance. After recommended changes were instituted, the judges felt he carried the role in a plausible manner. In order to test the confederate's plausibility with live Ss from both groups, two groups were run for practice. While most of these Ss found him to be a bit "weird," a post experimental interview indicated that every S accepted him as a class member.

The confederate's specific behavior will be described below as it occurs in the experimental sequence.
Initial Testing and Experimental Groups

The EI-ISB, IS, and a questionnaire concerned with demographic and college status data were administered to the Ss in their respective classes. In addition a SRS\textsuperscript{1} was given in class so that it could be used later as a basal measure (SRS\textsubscript{B}) against which to compare changes in SRS during the experiment. That is, the SRS\textsubscript{B} was designed to serve as an index of how Ss evaluated themselves in a reasonably neutral situation. Depending on whether a S's scores on both the IS and EI-ISB were above or below the median of his population, he was classified as either a high or low ego identity S. Subjects were assigned to high and low ego identity groups of five (four Ss plus the confederate) solely on the basis of their appointment time preference. There was no opportunity for them to arrange joint appointments with friends. This procedure led to a total number of 16 groups (64 Ss): four high and four low ego identity groups for Group A and for Group B. All groups met for the experiment within three weeks of the initial testing.

Experimental Procedures

(1) Pre-experimental stress condition

As soon as a group was assembled outside of the experimental room, each S was taken individually to a nearby room. The E kept

\textsuperscript{1}The SRS basal measure is identical to the SRS\textsubscript{1}.\n
referring to a graphed MMPI profile sheet and a copy of the tests S
completed in class while he related the following:

I've gone over the personality tests you took
in class during the first part of the experi­
ment. I'm afraid I can't tell you too much
about the results because the pattern of your
answers was very atypical. You may recall that
there were three parts to this test. Well
(pointing to the graph) the three parts were
very inconsistent with one another. Frankly,
I've rarely seen such an unusual and incon­
sistent test pattern. At this point, I'm
not quite sure how to interpret this pattern.
I would rather wait until I have the additional
information about your performance in the ex­
periment, and then go back to this and re­
analyze it. Perhaps then I can give you a
more meaningful interpretation. In any
event I will contact you within two weeks after
the experiment. Just do the best you can
during the experiment.

In many studies (Lazarus et al., 1963) the typical method of
stress induction was to single out some specific personality attri-
butes (e.g., intelligence, adjustment) and label them as "bad" or
lower than the S's estimate. In the present study stress was induced
by telling the S that his personality, via his initial tests, was in
effect unusual, inconsistent, and difficult to interpret. The pur­
pose of this approach was to create doubt by hinting at the possi­
bility of personality pathology, but leaving it up to the S to fill
in for himself what was wrong, if anything.

If it is true that the ego diffuse individual scans for ex­
ternal cues to firm up his self definition in a novel, unstructured
situation, then in effect the test feedback should have produced
little clarification, and supposedly much self doubt. The intended
communication was designed to turn the $S$ toward the experimental situation for further definition. Some of the research findings cited earlier provided reasonable assurance that diffuse individuals would accept this form of self invalidation more than self-integrated $S$s. These data also show that once such discordant messages are accepted, $S$s are more prone to utilize forthcoming situational messages as a means of resolving the self discrepancies elicited earlier. Further, it was anticipated that, depending on degree of acceptance of the feedback, $S$s would be differentially motivated and pressured to succeed at the experimental tasks. In turn it was expected that the greater the degree of ego involvement in the experiment, the more likely it would be to overlook the impossibility of the tasks and to accept the provided cues (varying reinforcement) as a measure of self worth.

In general, then, the initial stress manipulation was designed to lower self esteem by intimating that the $S$'s personality was diffuse (defied analysis) and that his diffusion was of a different order than that of his peers. The intended purpose was to heighten the need to perceive peers as similar to oneself, and thereby to increase the chances of scapegoating the confederate as a means of accomplishing peer congruity.

After the last $S$ had undergone the feedback procedure, the group was taken into the experimental room and each $S$ assigned a seat in the order in which he showed up for the experiment. The confederate was always assigned the last seat, number five. Neither the $E$ nor
the confederate knew which groups were high or low ego identity during the experiment.

(2) Pre-experimental group interaction

Upon entering the room the first name and seat number of each S was entered on a seating chart in the front of the room. When the E got around to obtaining the name of the last person, the confederate, the latter paused and quietly said "Tray." The E then asked how he spelled it, and the confederate replied, in a slow, overly deliberate manner "TRAY," the way it sounds.

The purpose of this interchange was to reflect the confederate's idiosyncratic style of responding to authority and to the regimentation of ritual.

Next the group was told:

It will take me around ten minutes to set up this projector and the other equipment. During that time I would like you to get to know one another. Why don't we start with in seat number one, then go around the table and tell the others a little about yourselves. Perhaps something about your background and college plans might be helpful.

Throughout this group interaction process the confederate sat with his legs propped up so that his boots showed over the table top. The sunglasses he occasionally wore were pushed away from his eyes as he again tuned the group out by intently reading a magazine. When it came his turn to introduce himself, he continued reading for some seconds, looked up a bit surprised, and said the following in his usual indifferent manner:
Here we go again. People call me Tray...
Oh I don't go for this introduction jazz...
Why do all you guys look so nervous anyway?

The confederate went back to his magazine and at that point E cut off
any further discussion by beginning the experimental instructions.

(3) General experimental instructions

As you know this is a study about subliminal perception and interpersonal sensitivity. From previous studies like this one, we have found that college students can do fairly well on such subliminal tasks if they are reasonably free of personality problems. The reason for this is that to do well you must feel relaxed enough to let yourself go and rely on your immediate feelings or your intuition.

On that screen in front of you I'm going to flash pictures of people in various situations. The screen is divided into five equal parts. I want each of you to focus only on the section that corresponds to your seat number. Thus, $S$ number 1 will look only at screen section number 1; $S$ number 2 will look only at screen section number 2, and so on for the rest of you.

These pictures will be flashed rapidly. Your task is to try to determine what was in your section of the picture. If each of you can accurately determine what was in your section, in effect we will be able to fit five pieces of a puzzle together and guess what the scene of the picture was, as well as the mood of the people in that scene. It is up to you as a group to try to help each other solve the puzzle.

(4) Description of experimental apparatus

The screen was a 5' x 5' piece of heavy white cardboard divided into five equal sections. Each section was labeled "Subject Number 1," "Subject Number 2," etc., both at the top and bottom of each section.
The screen was suspended in front of the group who sat in a semi circle around a large table about eight feet away from it. To the left of the screen was the seating chart with the first name of each S entered.

A Revere projector with an Alplax shutter was used to project the slides at 1/100 of a second. The projector stood 15 feet from the screen.

The nine color slides used in the experimental trials consisted of an abstract or impressionistic painting superimposed on a slide showing several men, women, and children in various contexts. The slides which contained the people were typical family scenes shot at picnics, weddings, amusement parks, etc. When the abstract painting was taped onto a "family" slide and flashed at 1/100 of a second, a group of five student judges were unable to determine the content. One typical impression was that of "some vague, colorful things."

Four judges thought various kinds of people were mixed in, but could not describe them in any further detail. The judges felt the slides were even more diffuse when viewed on the divided screen.

The purpose of this approach was first to present a task that was clearly impossible to solve both on a group and individual basis. Yet it was desirable to have a task that could be interpreted differentially by Ss in terms of plausibility and relevance to the SRS and CRS. That is, if a S concluded that the problem was impossible to solve, there would be little need for him to alter his ratings based on his performance or on the performance of the confederate. Similarly the divided screen and the group context of the problem
could be differentially interpreted as to relevance and plausibility. (After the two pre-experimental practice groups were run, the E asked Ss what method they used when successful. Some rather surprising answers were given, ranging from pure intuition to blinking of the eyes.) If the ego diffuse S interpreted his idiosyncratic solution method as being an "unsuccesful variant" of the methods employed by his peers, according to Erikson his anxiety level and sense of diffusion should increase.

(5) Pre-experimental practice trial

After the experimental instructions were read by E, a practice trial was given to insure that the procedures were understood, and also to present an easily interpreted slide to demonstrate further the possibility of "solving" the experimental task. This slide, a simple schematic farm scene flashed at 1/50 of a second was constructed to show the obvious farm content within each of the five sections of the screen; the slide as a whole easily added up to a typical farm scene. In section number one there was a farm, in number two grazing cows, in number three a tractor in a wheat field, in number four some pigs, in number five a silo, small barn, and chickens.

The instructions preceding the practice trial and the confederate's comments after the presentation were as follows:

E: For practice let's try a simple picture without people. Remember look only at your section of the screen. (Slide A flashed at 1/50 of a second.) Can anyone tell me what was in his section of that picture?
(Before any S could respond the confederate replied in a bored manner.)

C: Yeah, in my section some chickens and barn, a silo and some farm stuff ... the whole thing was a farm kind of thing.

(Slide A is then presented again and held for 10 seconds.)

E: That's excellent--very good! Did you all get the impression of a farm scene?

The confederate's behavior here was to quickly and adeptly solve the problem for the whole group, though most other Ss could have done the same thing given the opportunity. The purpose here was for the confederate to again ignore the authority of the E by interpreting the instructions in his own manner. This was not meant to be a hostile approach, but rather his indication of the simple minded nature of the task. The confederate's manner throughout was still one of indifference--he went right back to scanning his magazine afterwards.

(6) Experimental trial instructions

You will notice in your test booklet that for each picture you have a set of four choices. Since you each will focus on a different part of the picture, each of you has a different set of choices for that picture. However, all the parts of the picture fit together into a whole scene.

After you have looked at your section of the flashed picture, select the one choice that most nearly describes your feelings about what was in that section. Put an "X" in front of that choice and read that choice out loud when I tell you to do so. Once you have marked your choice do not change it.

These pictures have been specially designed so that the correct choice for each section is partly concealed somewhere in that section.
I have also ranked the four choices in terms of their accuracy, from the one correct choice down to the least correct choice. After you read your choice out loud, I will tell you how well you did by saying either "correct," "wrong," or "close." "Close" means your choice just missed being the correct one. Occasionally some students see more than one of the choices in their section of the picture, if that happens mark the one you recognized first. We will do this for three related pictures, then I will tell you how we will evaluate the three pictures.

Remember look only at your own section and try to rely on your immediate feelings. Even if none of the choices agree completely with your perception, pick the one that seems to come closest.

The set of picture choices for each S and for each trial are presented in Appendix H. For any given picture the choice sets were designed to appear related to a particular scene. For example, one picture supposedly represented a schoolroom situation and the content of each set of choices revolved around students at the blackboard, desks, etc.

(7) Experimental trials

Get ready for picture number 1. Remember, look only at your section of the screen and rely on your immediate feelings.

Ready (picture 1 presented).

Read the four choices for picture 1 and mark the one that most nearly describes your immediate feelings about what was in your section of that picture.

Beginning with S number 1, read your choice out loud.
This same procedure was followed for the first block of three trials (slides 1, 2, and 3). Below is the reinforcement sequence that was given to each S after he read his choice to the group.

<table>
<thead>
<tr>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIAL</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

After trial number three was completed the following instructions were given by E:

Fold this page back. Read the next page and mark your choice. When you have finished look up at the screen. Do not turn this page until I tell you. (S fills out the Picture Evaluation Sheet\(^2\))

Fold the page back. Complete the next page and look up at the screen when finished. Do not turn the page until told. (S fills out the SRS.)

I want to see if this subliminal procedure affected your ability to observe others around you. Thus, each of you is to judge the personality of some different member of this group. Since I don't want anyone to know who is rating him, I have written the seat numbers of the person you are to rate in the inside of the envelopes in front of you. When I tell you

\(^2\)The Picture Evaluation Sheet (Appendix I) was used simply to allow Ss to make a rapid summary statement about the mood of each set of three pictures. No hypotheses were made concerning differential responses to it.
to do so, pick up the envelope with the back of it facing you, open it up, look at the seat number, close the envelope, and then look at the seating chart so that you are sure you know who you are judging. Pick up the envelope now. After you complete this page look up at the screen. (S fills out CRS.)

Trials 4, 5, and 6 followed the exact procedure described for trials 1, 2, and 3. The reinforcement sequence for trials 4, 5, and 6 were as follows:

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>TRIAL</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5(confederate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WRONG</td>
<td>WRONG</td>
<td>WRONG</td>
<td>CLOSE</td>
<td>CORRECT</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CLOSE</td>
<td>WRONG</td>
<td>WRONG</td>
<td>WRONG</td>
<td>CLOSE</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>CLOSE</td>
<td>WRONG</td>
<td>WRONG</td>
<td>CLOSE</td>
<td>CORRECT</td>
<td></td>
</tr>
</tbody>
</table>

After trial number six was completed the Ss filled out, in order, Picture Evaluation Sheet, CRS, and SRS.

The instructions preceding CRS were:

You will each be judging the same person again. If you are not sure who that was, look inside the envelope again and check the seating chart.

Instructions for trials 7, 8 and 9 (the last three trials) were as follows:

We have found from previous studies that with practice some college students tend to increase their skill at subliminal tasks. Let's see how well you can do without help. No choices are provided nor will we read our impressions out loud.

After you have looked at the picture flashed in your section of the screen, guess what it
was and very briefly write down your impression in the provided space.

Get ready for picture number 7 (slide 7 presented). Write down your impression—briefly.

This procedure was followed for trials 8 and 9. No feedback was given after trials 7, 8, or 9. After trial number 9 was completed Ss filled out, in order, Picture Evaluation Sheet_3, SRS_3, and CRS_3. The CRS_3 was presented with the instructions "You will again be rating the same person in the group."

Control groups

Three randomly selected control groups (six Ss from Group A and six from Group B) were used to determine the stability of repeated SRS and CRS administrations in the absence of (1) the reinforcement conditions, (2) an impossible task, and (3) the experimental role of the confederate. All other conditions were the same as those in the experimental groups. That is, for the control groups easily solved tasks were interposed between the repeated dependent variable measures, and no feedback was given after each task was completed. In addition, the same confederate was told to dress in the experimental costume but behave as he normally does.

Before filling out each of the three SRS and CRS measures, the control Ss were shown at 1/5 of a second two pictures with five easily recognized sections. After each picture presentation Ss were asked, "In a few words try to guess what your section of the picture represents." Two warm up trials were given in which the group verbalized the content of their picture section. It was ascertained
that in all trials, including the warm up, all Ss were able to correctly state the content of their picture sections.

As before, control group Ss were told they were each to rate another group member, but in effect they all rated the confederate.
CHAPTER IV

RESULTS

The purpose of this study was to explore the effects of a stress inducing group situation on the perceptions of self and an outgroup confederate of high and low ego identity Ss. The major hypotheses were that (1) high ego identity Ss would evaluate themselves and the confederate more favorably than low ego identity Ss, and (2) that high ego identity Ss would be less effected (be more consistent) by the varying levels of reinforcement. A secondary aim of this study was to investigate the progression of the ego identity scores across year in college. It was hypothesized that underclass Ss and Group A Ss with no stated college major preference, would exhibit lower scores on the ego identity measures.

Level of SRS and CRS Ratings by High vs. Low Ego Identity Groups

The analysis of variance (Table 1) results show a significant effect in the overall high-low ego identity categorization ($F = 7.30, p < .01, df = 1/60$). This main effect indicates that high ego identity Ss tend to score higher on the combined SRS and CRS measures than do

---

3The primary analysis of variance is a $2 \times 2 \times 2 \times 2$ design with repeated measures on two factors (Winer, 1962).

55
### TABLE 1

**ANALYSIS OF VARIANCE OF OVER-ALL SRS AND CRS SCORES**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total between Subjects</td>
<td>63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C (High vs. Low Ego Identity)</td>
<td>1</td>
<td>1894.81</td>
<td>7.30**</td>
</tr>
<tr>
<td>D (Group A vs. Group B)</td>
<td>1</td>
<td>6345.63</td>
<td>24.46****</td>
</tr>
<tr>
<td>CD</td>
<td>1</td>
<td>278.47</td>
<td>1.07</td>
</tr>
<tr>
<td>error Ss/Gps.</td>
<td>60</td>
<td>259.39</td>
<td></td>
</tr>
<tr>
<td>Total within Subjects</td>
<td>320</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A (Reinforcement Conditions)</td>
<td>2</td>
<td>98.38</td>
<td>5.78***</td>
</tr>
<tr>
<td>AC</td>
<td>2</td>
<td>7.10</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>AD</td>
<td>2</td>
<td>4.35</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>ACD</td>
<td>2</td>
<td>23.58</td>
<td>1.39</td>
</tr>
<tr>
<td>error A x Ss/Gps.</td>
<td>120</td>
<td>17.03</td>
<td></td>
</tr>
<tr>
<td>B (SRS vs. CRS)</td>
<td>1</td>
<td>68881.38</td>
<td>263.22****</td>
</tr>
<tr>
<td>BC</td>
<td>1</td>
<td>1704.38</td>
<td>6.51*</td>
</tr>
<tr>
<td>BD</td>
<td>1</td>
<td>134.20</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>BCD</td>
<td>1</td>
<td>182.88</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>error B x Ss/Gps.</td>
<td>60</td>
<td>261.68</td>
<td></td>
</tr>
<tr>
<td>AB</td>
<td>2</td>
<td>41.89</td>
<td>2.45</td>
</tr>
<tr>
<td>ABC</td>
<td>2</td>
<td>4.71</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>ABD</td>
<td>2</td>
<td>26.43</td>
<td>1.54</td>
</tr>
<tr>
<td>ABCD</td>
<td>2</td>
<td>18.43</td>
<td>1.08</td>
</tr>
<tr>
<td>error A x B x Ss/Gps.</td>
<td>120</td>
<td>17.11</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>383</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .025  
**p < .01  
***p < .005  
****p < .001
the low ego identity Ss. A Newman-Keuls analysis of the significant interaction between high vs. low ego identity and SRS vs. CRS ($F = 6.51, p < .025, df = 1/60$) suggests that (1) both high ego identity groups scored higher on the SRS than did low ego identity groups, (2) all Ss scored much higher on the SRS than on the CRS, and (3) there is no difference between high and low ego identity groups in their rating of the confederate.

These results confirm the hypothesis that, overall, high ego identity Ss would score significantly higher on the SRS, regardless of varying reinforcement conditions, than would the low ego identity Ss (Table 2).

**TABLE 2**

**DIFFERENCES BETWEEN GROUPS FOR TOTAL SRS SCORES**

<table>
<thead>
<tr>
<th>Groups Compared</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A high vs. Group A low</td>
<td>16</td>
<td>60.96</td>
<td>8.94</td>
<td>4.72*</td>
</tr>
<tr>
<td>Group B high vs. Group B low</td>
<td>16</td>
<td>68.23</td>
<td>8.16</td>
<td>5.23*</td>
</tr>
</tbody>
</table>

*p = < .001
There is limited support for the hypothesis that high ego identity Ss would score higher on the CRS than low ego identity Ss. Although when all groups are combined the high identity Ss tend to score higher on the CRS, the Newman-Keuls test of the interaction group means suggests there is no significant difference between highs and lows regarding their mean scores on the CRS.

The non-significant interaction between high-low ego identity status, SRS vs. CRS, and Group A vs. Group B (Table 1) helps explain the partial lack of confirmation of this hypothesis. While the CRS means for Group B are in the predicted direction (Table 3), the high ego identity Ss of Group A tend to score lower on the CRS than the low identity Ss of Group A.

TABLE 3
DIFFERENCES BETWEEN GROUPS FOR TOTAL CRS SCORES

<table>
<thead>
<tr>
<th>Groups Compared</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A high vs. Group A low</td>
<td>16</td>
<td>27.40</td>
<td>6.93</td>
<td>1.54*</td>
</tr>
<tr>
<td>Group B high vs. Group B low</td>
<td>16</td>
<td>30.25</td>
<td>10.68</td>
<td>1.31</td>
</tr>
<tr>
<td>Group A low vs. Group B high</td>
<td>16</td>
<td>39.79</td>
<td>13.60</td>
<td>3.79**</td>
</tr>
</tbody>
</table>

*p = < .10 NS
**p = < .01
A comparison of the most extreme high and low ego identity groups (A low vs. B high) indicates that extreme low ego identity Ss rate the confederate significantly lower than extreme high ego identity Ss (Table 3).

In summary, the hypothesis that high ego identity Ss would evaluate themselves more favorably than low ego identity Ss, regardless of varying reinforcement conditions, was supported by the data. The overall hypothesis that high ego identity Ss would rate the confederate higher than low ego identity Ss failed to be clearly supported. Partial conformation of this last hypothesis was obtained in the comparison between extreme high vs. low ego identity groups which showed that highs judged the confederate significantly more favorable than low ego identity Ss.

**Consistency of SRS and CRS Ratings By High vs. Low Ego Identity Groups**

**Control Group**

In order to examine the consistency of dependent variable measures under the experimental conditions, it is first necessary to determine the stability of these measures in the absence of the experimental conditions. The analysis of variance (Table 4) results show that the Control Group means of the repeated SRS, CRS, and the SRS\textsubscript{B} do not differ significantly from one another. This finding indicates that in the absence of the experimental conditions the dependent variable means change very little as a result of repeated scale administration.
When the control and experimental groups are compared with respect to SRS (Table 5) and CRS (Table 6) scores, the results indicate that Control Group Ss' scores are significantly higher on both scales. This finding suggests that the experimental conditions significantly affect the SRS and CRS scores and that in general these conditions tend to result in lower SRS and CRS scores for all Ss, regardless of ego identity category.

### TABLE 5

DIFFERENCES BETWEEN CONTROL GROUP AND EXPERIMENTAL GROUPS FOR TOTAL SRS SCORES

<table>
<thead>
<tr>
<th>Groups Compared</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Groups</td>
<td>12</td>
<td>65.89</td>
<td>10.20</td>
<td></td>
</tr>
<tr>
<td>vs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Groups</td>
<td>64</td>
<td>60.26</td>
<td>10.10</td>
<td>2.77*</td>
</tr>
</tbody>
</table>

*p < .005
TABLE 6
DIFFERENCES BETWEEN CONTROL GROUP AND EXPERIMENTAL GROUPS FOR TOTAL CRS SCORES

<table>
<thead>
<tr>
<th>Groups Compared</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>12</td>
<td>63.47</td>
<td>12.25</td>
<td>12.55*</td>
</tr>
<tr>
<td>vs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Groups</td>
<td>64</td>
<td>33.48</td>
<td>11.83</td>
<td></td>
</tr>
</tbody>
</table>

*p < .001

Consistency of SRS ratings

In order to test the hypothesis that low ego identity Ss would vary their SRS scores during the experiment to a greater degree than high ego identity Ss, the means of the SRS - SRS deviations for all three SRS presentations were tested for differences. The assumption here is that the pre-experimental SRS measure (SRS) represents self evaluation tendencies under fairly neutral conditions. Thus in order to examine SRS changes due to experimental effects, with a more characteristic SRS rating, the SRS - SRS deviation procedure was utilized.

The results of this analysis (Table 7) show that for each Group, the low ego identity Ss do not vary their SRS scores more than the high ego identity Ss. This hypothesis, then, failed to be supported.

However, a comparison of extreme high and low ego identity groups suggests that high ego identity Ss of Group B vary their SRS
scores from the SRS$_B$ significantly less than extreme low ego identity Ss of Group A (Table 7).

**TABLE 7**

**DIFFERENCES BETWEEN THE SUMS OF SRS$_B$-SRS SCORE DEVIATIONS**

<table>
<thead>
<tr>
<th>Groups Compared</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A high vs. Group A low</td>
<td>16</td>
<td>23.69</td>
<td>16.13</td>
<td>0.08</td>
</tr>
<tr>
<td>Group B high vs. Group B low</td>
<td>16</td>
<td>15.63</td>
<td>9.00</td>
<td>1.27</td>
</tr>
<tr>
<td>Group B high vs. Group A low</td>
<td>16</td>
<td>15.63</td>
<td>9.00</td>
<td>1.88*</td>
</tr>
</tbody>
</table>

*p < .05

**Consistency of CRS ratings**

Since it was not feasible to obtain a CRS pre-experimental basal measure, change in CRS scores were measured by examining the sum of (CRS$_{NR}$ - CRS$_p$) + (CRS$_{NR}$ - CRS$_N$) deviations. The results of this test (Table 8) show no significant differences between high and low ego identity Ss for Groups A and B. Thus the hypothesis that low ego identity Ss would vary their CRS scores more than high ego identity Ss failed to be confirmed.
TABLE 8
DIFFERENCES BETWEEN CRS SCORE DEVIATIONS
UNDER POSITIVE AND NEGATIVE REINFORCEMENT
FROM THE CRS SCORE UNDER NO-REINFORCEMENT

<table>
<thead>
<tr>
<th>Groups Compared</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A high vs.</td>
<td>16</td>
<td>7.38</td>
<td>5.92</td>
<td>0.21</td>
</tr>
<tr>
<td>Group A low</td>
<td>16</td>
<td>6.88</td>
<td>6.36</td>
<td></td>
</tr>
<tr>
<td>Group B high vs.</td>
<td>16</td>
<td>8.75</td>
<td>6.16</td>
<td>0.14</td>
</tr>
<tr>
<td>Group B low</td>
<td>16</td>
<td>9.13</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

Consistency of SRS and CRS ratings and Reinforcement conditions

The hypothesis to be tested here is that low ego identity Ss would vary their SRS and CRS scores in the direction of the reinforcement.

The primary analysis of variance results (Table 1) indicate a significant overall effect of the reinforcement conditions variable ($F = 5.78, p < .005, df = 2/100$). However, when the three reinforcement condition means (positive, negative, and no-reinforcement) are tested by the Newman-Keuls procedure, the results show no significant differences between the positive and negative reinforcement conditions. The significant main effect is related to the higher SRS and CRS scores under the no-reinforcement condition.
These results fail to confirm the hypothesis that low ego identity Ss would be more influenced in their CRS and SRS ratings as a function of the type of reinforcement effect.

In summary, except for comparisons between extreme high and low ego identity groups, the hypothesis that low ego identity Ss would be less consistent in their SRS and CRS scores than high ego identity Ss failed to be supported. Also unconfirmed was the hypothesis that low ego identity Ss would vary their SRS and CRS ratings in the direction of the type of reinforcement in operation. Positive and negative reinforcement conditions showed no differential effect on the dependent variable scores. Extreme group comparisons offer limited support that Ss on the diffuse end of the ego identity continuum were more variable in their SRS ratings than Ss on the ego identity end of the distribution.

**Population Comparisons**

A comparison of the two populations with respect to age and year in college (Table 9) reveals that Group A consists of younger college males who are concentrated in the freshman and sophomore years.
TABLE 9
COMPARISON OF AGE AND COLLEGE
STATUS DISTRIBUTION

<table>
<thead>
<tr>
<th>Group</th>
<th>Age Range</th>
<th>Median Age</th>
<th>Year in College</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Freshman</td>
</tr>
<tr>
<td>A</td>
<td>18-27</td>
<td>19</td>
<td>47</td>
</tr>
<tr>
<td>B</td>
<td>18-25</td>
<td>21</td>
<td>0</td>
</tr>
</tbody>
</table>

Relationship between IS and EI-ISB

The correlation between the independent variables for all Ss shows a moderate, though significantly positive relationship ($r = .48$, $p < .001$). The finding that these two scales are related, though not completely overlapping, offers some support for the earlier assumption that they would assess different aspects of the ego identity construct.

IS Group comparisons

A comparison of the IS scores (Table 10) indicates that Group B Ss have a significantly higher ceiling than Group A. That is, relative to Group A, Group B tends to be skewed towards the ego identity

Since the experimental Ss selection procedure would have yielded a spuriously high correlation, the above correlation was based on the total ($N = 99$) number of students participating in the study. This includes control group Ss and those students dropped because their IS and EI-ISB scores were not both above or below the median.
end of the continuum. This is further illustrated by comparing both Groups with Henry's normal (ego identity) population norms ($M = 77.00$, $SD = 11.76$). The mean IS score for Group B is within 1 SD of the norm while the mean score for Group A is closer to 2 SDs below Henry's norm. For the low ego identity groups Group A is significantly lower on the IS scale than Group B.

### TABLE 10
**DIFFERENCES BETWEEN GROUPS FOR IS SCORES**

<table>
<thead>
<tr>
<th>Groups Compared</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A vs. Group B</td>
<td>32</td>
<td>63.00</td>
<td>13.85</td>
<td>2.38*</td>
</tr>
<tr>
<td>Group A high vs. Group B high</td>
<td>16</td>
<td>74.31</td>
<td>4.44</td>
<td>3.94**</td>
</tr>
<tr>
<td>Group A low vs. Group B low</td>
<td>16</td>
<td>51.68</td>
<td>10.40</td>
<td>2.85**</td>
</tr>
</tbody>
</table>

*$p < .025$  
**$p < .005$  

**Group EI-ISB comparisons**

With respect to the EI-ISB (Table 11), of the high ego identity Ss Group B is also skewed more in the direction of ego identity relative to Group A. In terms of Marcia's norms (1964, p. 87), both high ego identity groups were above the mean for his identity achieve-
ment group (M = 48.28, SD = 5.10), while both low groups were below the mean for his identity diffusion group (M = 43.33, SD = 3.52). The EI-ISB mean of Group A as a whole, however, was near the diffuse end of Marcia's status continuum, and Group B as a whole was midway between the identity and ego diffuse end points.

TABLE 11

DIFFERENCES BETWEEN GROUPS FOR EI-ISB SCORES

<table>
<thead>
<tr>
<th>Groups Compared</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A vs. Group B</td>
<td>32</td>
<td>43.90</td>
<td>5.43</td>
<td>1.15</td>
</tr>
<tr>
<td>Group A high vs. Group B high</td>
<td>16</td>
<td>48.50</td>
<td>2.17</td>
<td>3.85*</td>
</tr>
<tr>
<td>Group A low vs. Group B low</td>
<td>16</td>
<td>39.31</td>
<td>3.49</td>
<td>1.22</td>
</tr>
</tbody>
</table>

*p < .005

In summary, then, these data suggest that while both Groups meet the normative criteria for the ego diffuse end of the continuum, Group B better approximates the norms for the ego identity end. In general, Group A is significantly lower than Group B on both ego identity measures.
**Ego Identity and Progression Through College**

In comparing Group A with Group B as populations (i.e., without regard to high-low ego identity status) the primary analysis of variance (Table 1) shows that Group B Ss tend to score significantly higher on the combined dependent variable measure ($F = 24.46$, $p < .001$, $df = 1/50$). While no predictions were made regarding this specific finding, these data enter into the examination of independent variable score change across college years. It should be noted throughout the comparisons below that Group A consists of the majority of the underclass Ss in the combined groups distribution, and that their independent and dependent variable scores are skewed in the ego diffuse direction relative to Group B.

**Year in college and independent variable scores**

Inspection of the IS means (Table 12) and the EI-ISB means (Table 14) seems to indicate a progressive increase in these scores through the four college years. The largest shifts in the IS scores appear to occur between the first two and last two years in college. On the other hand the EI-ISB scores seem to be fairly evenly distributed across the four years.
TABLE 12
IS SCORES FOR SS' YEAR IN COLLEGE

<table>
<thead>
<tr>
<th></th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>17</td>
<td>18</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>57.94</td>
<td>67.00</td>
<td>69.81</td>
<td>74.00</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>14.87</td>
<td>9.80</td>
<td>11.58</td>
<td>12.21</td>
</tr>
</tbody>
</table>

TABLE 13
ANALYSIS OF VARIANCE OF IS SCORES
FOR YEAR IN COLLEGE

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Years</td>
<td>3</td>
<td>718.00</td>
<td>4.51*</td>
</tr>
<tr>
<td>Within Years</td>
<td>60</td>
<td>159.35</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .01

The analysis of variance results show the IS (Table 13) means and the EI-ISB (Table 15) means for year in college differ significantly. These results tend to support the hypothesis of a progressive increase in the ego identity through the four college years.
### TABLE 14

EJ-ISB SCORES FOR Ss' YEAR IN COLLEGE

<table>
<thead>
<tr>
<th></th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>17</td>
<td>18</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>M</td>
<td>42.18</td>
<td>44.11</td>
<td>47.50</td>
<td>48.08</td>
</tr>
<tr>
<td>SD</td>
<td>4.80</td>
<td>6.00</td>
<td>6.25</td>
<td>6.08</td>
</tr>
</tbody>
</table>

### TABLE 15

ANALYSIS OF VARIANCE OF EJ-ISB SCORES FOR YEAR IN COLLEGE

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Years</td>
<td>3</td>
<td>123</td>
<td>3.45*</td>
</tr>
<tr>
<td>Within Years</td>
<td>60</td>
<td>35.62</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05

Year in college and stated vs. unstated college major

The hypothesis that Ss who could state a college major would tend to have higher ego identity scores could only be tested for Group A. Nearly all of the Group B Ss stated a college major.
Those Ss who were able to state a college major had significantly higher scores on the IS (Table 16) and the EI-ISB (Table 17) than did the Ss who were unable to state a major. These results confirm the hypothesis that Ss who could state a college major would score higher on the ego identity criterion measures.

**TABLE 16**

**DIFFERENCES BETWEEN IS SCORES FOR GROUP A Ss WITH STATED vs. UNSTATED COLLEGE MAJOR**

<table>
<thead>
<tr>
<th>Groups Compared</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated College Major</td>
<td>12</td>
<td>70.83</td>
<td>8.83</td>
<td></td>
</tr>
<tr>
<td><strong>vs.</strong></td>
<td></td>
<td></td>
<td></td>
<td>2.67*</td>
</tr>
<tr>
<td>Unstated College Major</td>
<td>20</td>
<td>58.30</td>
<td>14.22</td>
<td></td>
</tr>
</tbody>
</table>

*p < .01

**TABLE 17**

**DIFFERENCE BETWEEN EI-ISB SCORES FOR GROUP A Ss WITH STATED vs. UNSTATED COLLEGE MAJOR**

<table>
<thead>
<tr>
<th>Groups Compared</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated College Major</td>
<td>12</td>
<td>46.92</td>
<td>3.64</td>
<td></td>
</tr>
<tr>
<td><strong>vs.</strong></td>
<td></td>
<td></td>
<td></td>
<td>2.61*</td>
</tr>
<tr>
<td>Unstated College Major</td>
<td>20</td>
<td>42.10</td>
<td>5.54</td>
<td></td>
</tr>
</tbody>
</table>

*p < .01
Summary of results

The hypothesis that high ego identity Ss would perceive themselves in a more favorable manner than low ego identity Ss was confirmed. The data did not clearly support the hypothesis that high as compared with low ego identity Ss would evaluate the confederate more positively. A comparison of extreme high and low groups, however, indicated that the most ego diffuse Ss viewed the confederate in a significantly less favorable light than did the highest ego identity group. All groups, (except the significant difference between extreme comparison groups) were equally as consistent in their self and confederate rating, thus the hypothesis of more variability for low ego identity Ss was not supported. Nor was there any confirmation for the hypothesis that low ego identity Ss would be more influenced by the varying reinforcement conditions. The data supported the prediction that both ego identity measures would significantly progress over the four college years. The results also confirmed the hypothesis that Group A Ss with a stated college major would score higher on both ego identity measures than Group A Ss who could not state a major preference.
CHAPTER V

DISCUSSION

In general, the present research departs from previous studies which have attempted to test Erikson's construct of ego identity through the introduction of a laboratory setting and controlled experimental manipulations. This approach constitutes, at face, a methodological advance over earlier work which has typically explored this construct through simple correlational procedures. The experimental operations employed towards this end include the development of a stress-inducing group situation and the systematic varying of stress intensity within the context of that situation. In brief, an insolvable group task, defined as an important index of personal adjustment, constituted the stressful situation while levels of stress were manipulated through differentially controlling success and failure experiences along a continuum from positive, to non-reinforcement, to negative reinforcement. The impact of the situation was further heightened through the introduction of a confederate who, unlike other group members, proved consistently successful and, by contrast, dramatically able to cope with both the stressful aspects of the situation and the insolvability of the tasks themselves.
Broadly, it was assumed that theoretically expected differences in high and low ego identity subjects would be reflected in their personal styles of coping with experimentally induced stress and the varied conditions. Two central hypotheses were advanced in an attempt to test these expected differences: (1) The Evaluative Hypothesis: Under the experimental conditions of stress and repeated failure, high ego identity Ss will evaluate themselves and an outgroup confederate more favorably than low ego identity Ss. (2) The Fluidity Hypothesis: The impact of differing reinforcements will serve to more systematically vary the self- and confederate- ratings of low as opposed to high ego identity Ss in the direction of the imposed reinforcement.

These hypotheses were derived from Erikson's broad developmental conceptualization of ego diffusion as a state, unlike ego identity, in which personal worth and self definition are repeatedly altered to reflect momentary and transitory experiences of success and failure. A typical solution for the acutely ego diffuse person in the resolution of such stress is to project the cause of his failure and subsequent hostility onto a convenient outgroup member, thereby accomplishing both the location of an external source for his conflict and an intensification of ingroup feeling. It was assumed that the confederate, already established as a fringe-group person through the role he enacted, would readily serve this needed scapegoat function.

In general, the trend of the data lends itself to two generalizations. Both ego diffuse and ego identity Ss show little fluidity in their evaluations of themselves (SRS) or their evaluations of the
confederate (CRS) under the three levels of reinforcement. Hence, the effectiveness of the success-failure manipulations has not been demonstrated. Second, ego identity Ss (both Group A and B) do rate themselves higher than low ego identity subjects throughout the stressful situation regardless of reinforcement conditions. Furthermore, there is limited evidence that Ss on the diffuse end of the identity continuum tend to evaluate the confederate less favorably than those toward the ego identity end.

Primary concern initially centers on the generally negative trend of the data in establishing the expected effectiveness of differential reinforcement procedures upon self- and confederate evaluations (Fluidity Hypothesis). Only when the most extreme high ego identity subgroup (Group B) was compared with the most extreme low ego identity subgroup (Group A) did the expected SRS score variability emerge.

The implications of these generally negative results cast some doubt on Erikson's conceptualization of ego diffusion as a state in which internal self definition is fluidly responsive to external evaluative cues. The question arises, therefore, whether the experimental operations employed in this study served as an adequate test of the ego identity construct. Critical discussion of these operations takes as its starting point an analysis of the experimental situation itself.
Demand characteristics of the experimental situation

Analysis of the experimental setting reveals that all Ss were presented with at least one central problem to cope with; that is, the problem of maintaining consistency in the face of an unaccountably changing experimental environment. Before the experiment, each S had been told that his initial test results proved to be inconsistent and, in effect, incomprehensible. He was then left with the understanding that his performance during the experiment might help to clarify the puzzle of his prior inconsistent test behavior. While this was designed to heighten stress and intensify efforts to succeed at the future tasks, it seems to have established "demand characteristics" (Orne, 1962) for consistency and therefore comprehensibility. Included in the experimental instructions was the statement that relatively well adjusted students have been found to do well at the experimental tasks. When faced with the tasks, however, a S had no clearly defined guidelines for mastery, nor could he identify on rational grounds the approach that led the confederate to "success." In effect, therefore, the fact that Ss had initially been "signaled" to behave consistently, and since no means of consistency in attacking the experimental tasks were available, the logical result was to focus on the most readily available alternative set of cues for consistency—the dependent variable scales (SRS and CRS).

Though the order and polar arrangement of both the scales were rearranged with each presentation, post-experimental information revealed that they were recognized as similar. It should be pointed
out that no attempt was made to disguise the fact that the three forms of the scales were similar. The intention of the alterations was to reduce repetitive monotony and the bias of a positional response set.

In summary, except for the most extreme identity diffuse Ss, most Ss coped well with the implicit demand to be consistent in whatever way they could. In a sense, this finding strongly supports Orne’s (1962) hypothesis that the demand characteristics of the social and psychological aspects of the experimental setting may override the intended demands of the experimental procedures. The data generated by this study show that for many Ss once they arrived at a level of self evaluation they tended to stay with it regardless of reinforcement changes.

Of interest, however, is the fact that while all Ss show little variability under levels of reinforcement, the extreme groups (high ego identity - Group B and low ego identity - Group A), taken alone, do reveal the predicted differences. What seems to be suggested here is that under the present experimental operations, only those relatively far out on the ego diffusion continuum were vulnerable enough to respond, as predicted, to the reinforcement operations. These findings do offer some support of Erikson’s formulations.

Independent Measures

A second general problem, less directed towards the absence of experimental results for the fluidity hypothesis, focuses on the deficiencies of the two independent measures. It will be recalled
that the two measures, Henry's Identity Scale (IS) and Marcia's Ego Identity-Incomplete Sentences Blank (EI-ISB), were utilized because face validity suggested that they were tapping different as well as overlapping referents of the ego identity construct. The IS scale consists mostly of items easily interpreted by college students as a measure of some adjustment-maladjustment dimension. It is, therefore, ripe for "social desirability" responding if one wishes to present a rosy facade. The EI-ISB, on the other hand, tends at times to elicit information too far removed from the ego-identity construct. Although the stems were developed in part with a focus upon occupational, religious and political data, personal information is frequently elicited which tends to be only tangentially related to Erikson's construct. Thus two individuals with the same ego identity score may differ considerably in the extent to which the content underlying the scores was relevant to the construct.

The two scales, however, are not so deficient as to be ineffective. Other findings in this study, in fact, have successfully related them as independent measures of the ego identity construct. It seems rather that they might not be sensitive enough to differentiate groups with respect to their responsiveness to such subtle experimental procedures as the present levels of reinforcement manipulations.
Results of Fluidity Hypothesis summarized

In general, the results of this study have failed to support the inference derived from Erikson's position that ego diffusion represents a state of extreme fluidity in which under conditions of lowered self esteem, externally evaluative cues serve to significantly alter one's personal sense of worth and definition. It was argued, however, that present operations, through their failure to control a pre-experimental demand to behave consistently, have superseded procedural demands designed to elicit differential, rather than consistent, evaluations. A subsidiary point, concerning the deficiencies of the independent measures, was also advanced. Finally, it was noted that extreme groups on the ego identity dimension do show the expected differences under the reinforcement procedures.

Evaluations of self and confederate

A second overriding hypothesis concerning the evaluation of self and an outgroup member (Evaluative Hypothesis) has, on the other hand, received support. In a stress-inducing situation, high ego identity subjects, as predicted, do rate themselves consistently higher than low ego identity subjects. Further, there is some evidence that an outgroup member, as predicted, is differentially evaluated by the two groups. These results represent, along with Marcia's, the first substantive empirical data obtained in a controlled laboratory setting on the ego identity construct. Marcia (1964) found that Ss high in Identity Status performed better on a stressful concept attainment task.
The confirmed predictions lend support to Erikson's theoretical assumption that individuals with a stable sense of ego identity can rely on internalized standards for self-evaluation. To the extent that self-evaluation was reflected by SRS scores, it can be argued that low ego identity Ss found the externally provided cues of stress and failure more relevant for self definition. In other words, whenever an individual is required to evaluate himself, he necessarily must refer to a system of internalized referents. If, as Erikson holds, these referents have over the years led the individual to consistent, socially reinforced conclusions about the self, then we would expect transitory external evaluation which negates this sense of personal identity to be rejected by identity-achieved individuals.

At a descriptive level, the consistent choice of adjectives employed by ego diffuse subjects as characteristic of themselves under the experimental conditions tends also to be in keeping with these formulations. To a significant extent, diffuse subjects responded more often or to a greater degree to such descriptive terms as "inconsistent," "dependent," "tense" and "pessimistic."

While this pattern of self-ratings is consistently in the predicted direction, ratings of the confederate manifest the predicted differences only when extreme groups are compared. Thus, Group A (Low) and Group B (High) do differ significantly in their ratings of the confederate or, within Erikson's formulations, in the extent to which they employ an outgroup member as a convenient scapegoat vehicle. This finding with extreme groups parallels previous con-
firmatory results of the Fluidity Hypothesis when, again, only extreme groups were compared. It will be recalled that extreme groups did differ significantly in the extent to which they altered their self-evaluations under the three reinforcement operations. The consistency of these findings with extreme groups raises some important implications for further study to be presented later.

In summary, present results support the hypothesis that high ego identity subjects tend to evaluate themselves more positively irrespective of stress and failure conditions than do low ego identity subjects. Moreover, with extreme groups, differential evaluations of an outgroup member have also been demonstrated. This latter result supports previous research (Pepitone and Wilpizski, 1960) which indicates that a scapegoat function is, under certain conditions, employed as a vehicle for resolving aroused hostility. The use of an outgroup in this manner is most vividly portrayed in Frankel-Brunswik's High-F Personality.

An alternative explanation

Perhaps a more refined or alternative explanation for the finding that self evaluations under conditions of stress are significantly reduced for diffuse as opposed to identity-achieved subjects centers about the Atkinson (1950) model of need for achievement. One could argue from this point of view, consistent with present data, that ego identity subjects have defined the experimental tasks as extrinsic to themselves and that needs to achieve are only engaged in the extent to which the task was seen as relevant and challenging. Low ego
identity subjects, on the other hand, by virtue of their reliance upon the importance of external feedback to define their personal roles, would view this task as within the bounds of a need for achievement situation. The fact that the task subsequently was found to be insolvable, resulted in lowered motivation for high ego identity subjects and heightened concerns over failure for the low ego identity subjects. This "involved versus noninvolved" disposition was reflected, therefore, in the subsequent differential self-ratings.

This position is largely advanced as an alternative or, perhaps, more refined explanation of present results. While it is tenable, it does not fully explain, however, the fact that both groups showed decreased self-evaluation under the stress of the experiment as opposed to control groups. Thus, the view of an ego identity subject as patently indifferent to the need achievement aspects of the situation seems questionable.

**Non-Laboratory Data**

In addition to attempts to design a laboratory situation for the testing of Erikson's formulations, the more traditional approach of relying upon broad self-disclosure measures was utilized to further define behavioral correlates of the ego identity construct. It was loosely hypothesized that commitment to the college milieu, and the attainment of a student identity, could roughly be viewed as a miniature model of Erikson's concepts of commitment to broader, life-long occupational and social goals. As such, the successful establishment
of an identity as a student, as reflected by the early commitment to a major field of study, may be taken to indicate a growth in ego identity. Secondly, the resolution of identity crises in college should lead to a progressive increase in ego identity as the student successively meets the adaptational requirements of moving from student to adult over the college years.

**Group A versus Group B differences**

Initial interest focuses upon the consistent finding that Group A Ss score significantly lower (more ego diffuse) than Group B Ss on both measures of ego identity. Group A, as mentioned, tends to be made up of underclass students, many of whom are having difficulty in working effectively and making decisions about career goals. Group B consists of advanced students who have declared a major area of study.

Erikson specifies that the capacity to formulate adult social roles and career goals, as well as taking effective early steps towards actualizing these ends, are important factors in the development of ego identity. He finds that an acute upset in one's sense of workmanship is often associated with the problem of the ego diffuse adolescent. In this sense, the lower criterion scores for Group A and their characteristic difficulties with sustained work represent a form of construct validity.

Erikson (1963) has argued that "it is the inability to settle on an occupational identity which disturbs young people" (p. 252).
Super (1957), too, has pointed out that the problems of identifying oneself within a particular strata of a work or school milieu has an important bearing on further development of an adult occupational identity.

Again, difficulties with establishing majors in college--more broadly, commitment to a career goal--is significantly more typical of Group A than Group B Ss, according to questionnaire obtained information.

In many college subcultures, choosing a major allows special implicit status, privileges and social entrees. Erikson (1959) has stated that an early commitment to a course of work (such as a major in college) enhances the functioning of the ego in that it offers a constructive activity with actual tools and materials in a communal reality (p. 145). Similarly, Beardslee and O'Dowd (1962) have expressed a similar view about students in their assertion that "locating a place in the world of work represents in part an attempt to implement one's self concept as well as a means of refining and extending it."

Both independent variables show a significant progression in ego identity from the first to the last year in college. Though the two populations represent opposite ends of the underclass-upperclass continuum, there still is a notable progressive difference between the first two years in IS score and a trend in that direction for the EI-ISB. One implication of this distribution is that the independent variable measures may be reflecting an increase in the
adaptive requirements for survival of the crucial first year in college.

In summary, self-disclosure measures reveal the expected differences in high and low ego identity Ss as to their commitment to career goals and the extent of their acknowledged difficulties with sustained work effort. While these findings are interpretable from many points of view, they are nonetheless consistent with the picture of emerging ego integrity which Erikson draws. Moreover, the fact that extreme subjects respond in the predicted direction to present experimental manipulations provides some laboratory-based data for the efficacy of the independent measures, and therefore, the efficacy of present division of subjects into high and low ego identity groups.

Summary and future research

In general, the results of this study provide only partial evidence for Erikson's formulations of the ego identity construct. Predicted differences concerning the fluidity of diffuse Ss failed to be demonstrated under varying levels of reinforcement. It was argued, however, that uncontrolled experimental demands obviated the possibility of obtaining such differential effects. On the other hand, low identity Ss, as predicted, rated themselves consistently lower, and also, to some degree, a confederate lower on the dependent measures. At a theoretical level, this data can be taken to support Erikson's position that low ego identity subjects are responsive to a stress-inducing failure situation in defining their own personal
identity and that a scapegoat operation characterizes to some extent the manner in which subsequent hostility and lowered self-esteem is resolved.

The promise of the present experimental paradigm as a systematic laboratory analogue in the study of the ego identity construct has received some support in the above results. In addition, the fact that extremes on the ego identity-diffusion dimension consistently show the predicted differences attests even stronger to the further usefulness of this experimental procedure. The importance of controlled manipulative research, as opposed to correlational study, in establishing both the necessary and sufficient casual conditions for prediction are stressed by Rapaport (1953) and generally accepted in the field of psychology today. The present paradigm offers just such promise in the study of ego identity. Several refinements are, of course, in order. Pre-experimental stress should be induced without at the same time establishing a set to behave in a consistent fashion throughout the experimental situation. Second, a task, which is not at face, seen as insolvable should be provided with the confederate simply coached as to the correct responses. This change would preclude the possibility that Ss could define the situation as extrinsic to themselves, and therefore more firmly test Erikson's notions in the context of a stress-inducing situation which, additionally, capitalizes upon high subject motivation to succeed. Thirdly, the manipulation of levels of reinforcement should be sustained over longer periods of time and subsequent changes more indirectly assessed.
Finally, the importance of obtaining extreme subjects may well prove to be basic to all these issues until more sensitive devices are designed. A college population, as employed in the present study, serves to attenuate the possibility of significant findings. *A priori* we would expect to find relatively few acutely diffuse Ss in such a setting.
CHAPTER VI

SUMMARY

Using Erikson's psychosocial theory, hypotheses were formulated about the manner in which ego diffuse as opposed to ego identity individuals function in a stress engendering group. The behaviors of major concern in this study were the level and consistency of one's evaluation of self and a confederate, previously established as a college fringe person, under varying levels of stress at a group oriented task offering no rational means for solution.

A secondary aim of this research was to examine the progression of the ego identity measures, and the issue of commitment to a college major, across the four years of college.

The central purpose of this study was to develop a new laboratory situation and related methodology in which to experimentally investigate the relevance of these behaviors as referents of the ego identity construct.

Criterion measures of the independent variable of ego identity were the Henry Identity Scale and Marcia's Ego Identity-Incomplete Sentences Blank. The IS was designed to assess self attributes and behaviors resulting from the polar outcomes (positive and negative)
of Erikson's psychosocial stages of development. The EL-ISB was developed to elicit data related to more current identity-related issues of, among other things, formulation of and commitment to career goals, and attitudes towards religion and politics. It was felt that both criterion measures, though somewhat overlapping, together provided a more adequate assessment of the ego identity construct.

Dependent variable measures consisted of (1) Self Rating Scale constructed by the writer to assess perception of personal attributes and task effectiveness under experimental conditions, and (2) Con­federate Rating Scale designed to elicit extreme positive or negative (stereotypical) attitudes towards the confederate's role in the group and task effectiveness.

A confederate was employed to serve as a convenient object for consignment to outgroup status and, consequently, as a target for scapegoat behavior. His role was that of a college fringe person with an air of detachment and bored indifference to the group and even to his own repeated success at the experimental tasks.

Self evaluation hypotheses were derived from Erikson's conceptualization of the ego diffuse individual as fluidly sensitive to external evaluative cues as index of personal worth and self definition, and identity-achieved individuals as better able to rely on long­standing, socially reinforced, internal standards of self judgment.

The basis for confederate evaluation hypotheses was that low ego identity, as opposed to high ego identity individuals, when con­
fronted with the threat of further diffusion consign an unconventional group member to outgroup status so as to make him a more plausible target for projection of negative attributes as well as to reinstate one's sense of ingroup membership.

Two central hypotheses were advanced to test expected differences in group behavior as a function of ego identity status: (1) The Evaluative Hypothesis: Under the experimental conditions of stress and repeated failure, high ego identity Ss will evaluate themselves and an outgroup confederate more favorably than low ego identity Ss. (2) The Fluidity Hypothesis: The impact of differing levels of reinforcement will serve to more systematically vary the self- and confederate- ratings of low as opposed to high ego identity Ss in the direction of the imposed reinforcement.

Two populations of male college students were used: (1) Group A consisted of 32 volunteer underclass students enrolled in a course designed to improve ineffective work skills and to help in the clarification of career objectives, and (2) Group B was made up of 32 advanced students with an established major field of study whose participation in this study was required.

Subjects were assigned to high or low ego identity status depending on whether both their IS and EI-ISB scores fell above or below the median of their respective population. Experimental groups each consisted of four Ss plus the confederate; a total number of eight low and eight high ego identity groups was employed.
Within three weeks after initial testing, and just prior to participation in the experiment, Ss were individually informed that their "personality" tests proved to be, unlike the other S's results, atypical in pattern and highly inconsistent with reference to the various parts. They were informed that the additional data from the experiment was required for clarification and further analysis. This manipulation was designed to lower self esteem and intensify motivation to succeed at the experimental tasks.

Before experimental tasks were presented each group was given ten minutes to become acquainted. At this point the confederate imparted his fringe character, indifferent role.

Abstract paintings were flashed at 1/100 of a second on a screen divided into five parts. In effect it was clearly impossible to arrive at any consensually validated description of any picture. Each S was to interpret what was in his own assigned section of the screen from a set of four choices for each picture, and read his choice to the group. The sets of choices were related to a central theme, e.g., a parade. The problem was presented as a subliminal task and said to be indicative of personal adjustment and interpersonal sensitivity.

Group orientation of the experimental tasks was accomplished by instructing Ss that, depending on the number of accurate interpretations of the picture, the group could fit the five parts together like a puzzle and derive its meaning as a whole. After each choice was read aloud, E informed them of interpretive accuracy (correct, wrong or close to correct). Each S received two negatively reinforced
series and one positive series (two "close" and one "wrong" feedback). The confederate was always either correct or close to being correct.

Following each of three sets of three picture trials, Ss were asked to rate themselves (SRS) and another group member (CRS); it was not known that all Ss evaluated the confederate.

Control groups made up of randomly selected Ss from both populations completed SRS and CRS scales in the absence of the stress conditions and the experimental role of the confederate.

Results confirmed the hypothesis that high ego identity Ss in both groups would evaluate themselves more favorably than low ego identity Ss. While there were no significant differences in confederate ratings within Group A and Group B high and low ego identity comparisons, extreme high and low ego identity group comparison showed significant differences as predicted. Thus there was limited support for the hypothesis that low as opposed to high ego identity Ss would judge the confederate more negatively.

Predictions relating to fluidity of SRS and CRS scores were generally not confirmed except for predicted differences in SRS fluidity between extreme comparison groups. Nor did the data support the hypothesis relating dependent variable score change to varying reinforcement conditions. These negative findings were attributed to (1) an unintended demand characteristic in the experimental situation for consistency, (2) a positive reinforcement procedure insufficiently intense to provide contrast for the negative condition.
Adding to the validity of the IS and EI-ISB were the finding that both ego identity scores progress significantly with year in college. Further, for Group A Ss, those Ss with a stated college major scored significantly higher on the ego identity measures than Ss unable to state a major preference.

The non-subtle nature of the IS items were criticized as being too amenable to socially desirable responding. The EI-ISB tended at times to elicit data too far removed from the ego identity construct.

In general, the results of this study provide only partial evidence for Erikson's formulation of the ego identity construct. The promise of the present experimental paradigm as a systematic laboratory analogue in the study of the ego identity construct has received some support in the above results.

Suggestions for future research with the present experimental paradigm included varying the degree of solvability of experimental tasks a new level of stress inducement procedure.
APPENDIX A

IDENTITY SCALE
1964

THE STUDY OF CAREERS IN MENTAL HEALTH

The Committee on Human Development
The University of Chicago
William E. Henry, Ph.D., Director

INSTRUCTIONS: On the next few pages are pairs of words or phrases arranged in the following way:

- tall 0 o . . o 0 short
- sad 0 o . . o 0 happy
- excitable 0 o . . o 0 calm

We'd like you to judge yourself as you really are by marking these pairs according to these directions:

first, decide which side (word or phrase) is more appropriate;
after deciding on which word or phrase you are going to mark,
then, decide how much or to what degree you feel this way and -

Circle: 0 - when you feel very much this way
       o - when you feel somewhat this way
       . - when you feel only slightly this way
APPENDIX A (CONTINUED)

There are no right answers. Your own opinion is what matters. Even where you find it difficult to make up your mind, BE SURE TO MAKE A CHOICE, AND ONLY ONE CHOICE. Otherwise your opinion can't be counted. Don't be disturbed if some of the word pairs are not exact opposites. Simply decide which of the two is most applicable and then decide to what degree you feel this way. Below is an example.

<table>
<thead>
<tr>
<th></th>
<th>tall</th>
<th>sad</th>
<th>excitable</th>
</tr>
</thead>
<tbody>
<tr>
<td>short</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>happy</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>calm</td>
<td>O</td>
<td>O</td>
<td></td>
</tr>
</tbody>
</table>

If you have any questions feel free to ask the administrator.
APPENDIX A (CONTINUED)

We'd like you to judge yourself as you really are.

Circle: 0 - when you feel very much this way
       o - when you feel somewhat this way
       . - when you feel only slightly this way

1. sense of well-being 0 o . .  o 0 sense of emptiness
2. emotionally disorganized 0 o . .  o 0 emotionally integrated
3. anxious 0 o . .  o 0 secure
4. sexually attractive 0 o . .  o 0 sexually unattractive
5. keeping 0 o . .  o 0 giving
6. unprepared 0 o . .  o 0 ready
7. feminine 0 o . .  o 0 not feminine
8. sharing 0 o . .  o 0 jealous
9. sexually inactive 0 o . .  o 0 sexually active
10. contributing 0 o . .  o 0 conserving
11. willing to be a leader 0 o . .  o 0 unwilling to be a leader
12. foolhardy 0 o . .  o 0 careful
13. difficulty in showing feelings 0 o . .  o 0 usually express feelings easily
14. powerful 0 o . .  o 0 ineffective
15. unproductive 0 o . .  o 0 productive
16. unskilled 0 o . .  o 0 skilled
17. giving 0 o . .  o 0 demanding
18. clean 0 o . .  o 0 dirty
19. fuzzy 0 o . .  o 0 clear
APPENDIX A (CONTINUED)

20. willing to be a follower 0 . . . 0 unwilling to be a follower
21. contemptuous 0 . . . 0 accepting
22. justified 0 . . . 0 guilty
23. exposed and vulnerable 0 . . . 0 covered and defended
24. consistent feelings about myself 0 . . . 0 inconsistent feelings about myself
25. sufficient progress 0 . . . 0 life is getting away from me
26. people know what to expect of me 0 . . . 0 people don't know what to expect of me
27. bored 0 . . . 0 ecstatic
28. people can trust me 0 . . . 0 sometimes I let people down
29. not masculine 0 . . . 0 masculine
30. moderate 0 . . . 0 overdo things
31. enriched 0 . . . 0 barren
32. worthy 0 . . . 0 unworthy
33. unloved 0 . . . 0 loved
34. stubborn 0 . . . 0 cooperative
35. short-lived relationships 0 . . . 0 enduring relationships
36. self-doubting 0 . . . 0 self-assured
37. relaxed 0 . . . 0 tense
38. sluggish 0 . . . 0 quick
39. a sense of loneliness 0 . . . 0 a sense of belonging
<table>
<thead>
<tr>
<th></th>
<th>APPENDIX A (CONTINUED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.</td>
<td>usually non-conforming 0 o . . o 0 conforming</td>
</tr>
<tr>
<td>41.</td>
<td>on my guard with others 0 o . . o 0 trusting of other people</td>
</tr>
<tr>
<td>42.</td>
<td>growing 0 o . . o 0 stagnant</td>
</tr>
<tr>
<td>43.</td>
<td>frustration 0 o . . o 0 rapture</td>
</tr>
<tr>
<td>44.</td>
<td>acceptance of death 0 o . . o 0 fear of death</td>
</tr>
<tr>
<td>45.</td>
<td>undemonstrative 0 o . . o 0 affectionate</td>
</tr>
<tr>
<td>46.</td>
<td>safe 0 o . . o 0 apprehensive</td>
</tr>
<tr>
<td>47.</td>
<td>self-condemning 0 o . . o 0 accepting of myself</td>
</tr>
<tr>
<td>48.</td>
<td>知道我想成为 0 o . . o 0 unsure as to what I want to be</td>
</tr>
<tr>
<td>49.</td>
<td>able to concentrate 0 o . . o 0 easily distracted</td>
</tr>
<tr>
<td>50.</td>
<td>despairing 0 o . . o 0 hoping</td>
</tr>
<tr>
<td>51.</td>
<td>inhibited 0 o . . o 0 spontaneous</td>
</tr>
<tr>
<td>52.</td>
<td>on time 0 o . . o 0 late</td>
</tr>
<tr>
<td>53.</td>
<td>cynical 0 o . . o 0 believing</td>
</tr>
<tr>
<td>54.</td>
<td>in control 0 o . . o 0 overwhelmed</td>
</tr>
<tr>
<td>55.</td>
<td>manipulated by others 0 o . . o 0 self-directed</td>
</tr>
<tr>
<td>56.</td>
<td>sharing 0 o . . o 0 lonely</td>
</tr>
</tbody>
</table>
APPENDIX B

SCORING PROCEDURE FOR THE IDENTITY SCALE

Full Scale Scoring

Each item is scored on a 1 to 7 point scale (the middle point 4 is excluded). The extreme positive pole of an item is scored 7 and the extreme negative pole of that item is scored 1.

For example, item number 3 is scored as follows:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>anxious</td>
<td>0</td>
<td>o</td>
<td>o</td>
<td>0</td>
<td>secure</td>
</tr>
</tbody>
</table>

For the following items the positive pole is stated first:
1, 4, 8, 10, 11, 14, 17, 18, 20, 22, 24, 25, 26, 28, 30, 31, 32, 37, 42, 44, 46, 48, 49, 52, 54, and 56; the remainder of the items begin with the negative pole.

Identity Factor Scoring

The identity factor for males is made of the following 14 items: 4, 6, 16, 26, 27, 28, 30, 31, 36, 39, 43, 47, 48, and 49. Identity factor scores range from a maximum of 98 (most ego identity) to 14 (most ego diffuse).

99
Name ___________________________ Age _______ Class _________

Marital Status _______ Date ________

Complete these sentences to express your real feelings. 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 ________________________________
APPENDIX C (CONTINUED)

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________________________
APPENDIX C (CONTINUED)

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 D

ALTERNATE SELF RATING SCALE FORMS

We'd like you to judge: MYSELF AS I REALLY FEEL RIGHT NOW.

First, decide which side (word or phrase) is more appropriate; after deciding on which word or phrase you are going to mark; then, decide how much or to what degree you feel this way and -

Circle: 0 - when you feel very much this way
      o - when you feel somewhat this way
      . - when you feel only slightly this way

Try to be frank and describe yourself as you really feel this moment, not as you would like to be.

Right now I honestly feel:

1. inconsistent 0 o . . . o 0 consistent
2. spontaneous 0 o . . . o 0 inhibited
3. dependent 0 o . . . o 0 independent
4. mature 0 o . . . o 0 immature
5. tense 0 o . . . o 0 relaxed
6. like myself 0 o . . . o 0 unlike myself
7. insensitive 0 o . . . o 0 sensitive
<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>optimistic</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
<td>o</td>
<td>0 pessimistic</td>
</tr>
<tr>
<td>9.</td>
<td>unlike others here</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
<td>o</td>
<td>0 like others here</td>
</tr>
<tr>
<td>10.</td>
<td>active</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
<td>o</td>
<td>0 passive</td>
</tr>
<tr>
<td>11.</td>
<td>doubtful</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
<td>o</td>
<td>0 confident</td>
</tr>
<tr>
<td>12.</td>
<td>creative</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
<td>o</td>
<td>0 conventional</td>
</tr>
</tbody>
</table>

SRS_{1}
APPENDIX D (CONTINUED)

We'd like you to judge: **MYSELF AS I REALLY FEEL RIGHT NOW.**

First, decide which side (word of phrase) is more appropriate; after deciding on which word or phrase you are going to mark, then, decide how much or to what degree you feel this way and -

Circle: 0 - when you feel **very** much this way
       o - when you feel **somewhat** this way
       . - when you feel only **slightly** this way

Try to be frank and describe yourself as you really feel **this moment,** not as you would like to be.

Right now I honestly feel:

1. sensitive 0 o . . o 0 insensitive
2. inconsistent 0 o . . o 0 consistent
3. creative 0 o . . o 0 conventional
4. inhibited 0 o . . o 0 spontaneous
5. confident 0 o . . o 0 doubtful
6. unlike myself 0 o . . o 0 like myself
7. optimistic 0 o . . o 0 pessimistic
8. dependent 0 o . . o 0 independent
9. active 0 o . . o 0 passive
10. tense 0 o . . o 0 relaxed
11. like others here 0 o . . o 0 unlike others here
12. immature 0 o . . o 0 mature
APPENDIX D (CONTINUED)

We'd like you to judge: **MYSELF AS I REALLY FEEL RIGHT NOW.**

First, decide which side (word or phrase) is more appropriate; after deciding on which word or phrase you are going to mark, then, decide how much or to what degree you feel this way and -

Circle:  0 - when you feel **very** much this way
       0 - when you feel **somewhat** this way
       . - when you feel only **slightly** this way

Try to be frank and describe yourself as you really feel **this moment**, as you would like to be.

Right now I honestly feel:

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. conventional</td>
<td>0</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>0</td>
<td>creative</td>
<td></td>
</tr>
<tr>
<td>2. confident</td>
<td>0</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>0</td>
<td>doubtful</td>
<td></td>
</tr>
<tr>
<td>3. passive</td>
<td>0</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>0</td>
<td>active</td>
<td></td>
</tr>
<tr>
<td>4. like others here</td>
<td>0</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>0</td>
<td>here</td>
<td></td>
</tr>
<tr>
<td>5. pessimistic</td>
<td>0</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>0</td>
<td>optimistic</td>
<td></td>
</tr>
<tr>
<td>6. sensitive</td>
<td>0</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>0</td>
<td>insensitive</td>
<td></td>
</tr>
<tr>
<td>7. unlike myself</td>
<td>0</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>0</td>
<td>like myself</td>
<td></td>
</tr>
<tr>
<td>8. relaxed</td>
<td>0</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>0</td>
<td>tense</td>
<td></td>
</tr>
<tr>
<td>9. immature</td>
<td>0</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>0</td>
<td>mature</td>
<td></td>
</tr>
<tr>
<td>10. independent</td>
<td>0</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>0</td>
<td>dependent</td>
<td></td>
</tr>
<tr>
<td>11. inhibited</td>
<td>0</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>0</td>
<td>spontaneous</td>
<td></td>
</tr>
<tr>
<td>12. consistent</td>
<td>0</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>0</td>
<td>inconsistent</td>
<td></td>
</tr>
</tbody>
</table>

SRS3
APPENDIX E

SCORING PROCEDURE FOR THE SELF RATING SCALE

Each item is scored on a 1 to 7 point scale (the middle point 4 is excluded). The scoring procedure follows the form used in Appendix B.

The order of item presentation and the initial pole presented have been altered on each of the three forms of the SRS, though the scoring procedure is identical for each SRS form.

On the SRS1 the following items are presented with the positive pole stated first: 2, 4, 6, 8, 10, 12. The remainder of the items begin with the negative pole.

A maximum score of 84 denotes the most favorable self evaluation; the minimum score of 12 denotes the most negative self evaluation.
APPENDIX F

ALTERNATE CONFEDERATE RATING SCALE FORMS

We'd like you to judge the assigned group member **AS HE REALLY APPEARS TO ME NOW.**

First, decide which side (word or phrase) is more appropriate; after deciding on which word or phrase you are going to mark, then, decide how much or to what degree you feel this way and -

<table>
<thead>
<tr>
<th>Circle:</th>
<th>0 - when you feel <strong>very</strong> much this way</th>
<th>o - when you feel <strong>somewhat</strong> this way</th>
<th>. - when you feel only <strong>slightly</strong> this way</th>
</tr>
</thead>
</table>

Try to be frank and rate this person the way you feel about him **at this moment.**

Right now I feel he is:

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>trustful</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
<td>o</td>
<td>0</td>
<td>distrustful</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>unlike me</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
<td>o</td>
<td>0</td>
<td>like me</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>tolerant</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
<td>o</td>
<td>0</td>
<td>intolerant</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>unpleasant</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
<td>o</td>
<td>0</td>
<td>pleasant</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>deep</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
<td>o</td>
<td>0</td>
<td>shallow</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>snobbish</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
<td>o</td>
<td>0</td>
<td>sociable</td>
<td></td>
</tr>
</tbody>
</table>

108
APPENDIX F (CONTINUED)

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>tactful</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>8.</td>
<td>prudish</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>9.</td>
<td>smooth</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>10.</td>
<td>aggressive</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>11.</td>
<td>like the others here</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>12.</td>
<td>unimaginative</td>
<td>0</td>
<td>o</td>
<td>.</td>
<td>.</td>
</tr>
</tbody>
</table>

CRS_1
APPENDIX F (CONTINUED)

We'd like you to judge the assigned group member AS HE REALLY APPEARS TO ME NOW.

First, decide which side (word or phrase) is more appropriate; after deciding on which word or phrase you are going to mark, then, decide how much or to what degree you feel this way and -

Circle:  O - when you feel very much this way
        o - when you feel somewhat this way
        . - when you feel only slightly this way

Try to be frank and rate this same person the way you feel about him at this moment.

Right now I feel he is:

1. sociable  0 o .  . o 0 snobbish
2. aggressive  0 o .  . o 0 passive
3. trustful  0 o .  . o 0 distrustful
4. imaginative  0 o .  . o 0 unimaginative
5. tactless  0 o .  . o 0 tactful
6. deep  0 o .  . o 0 shallow
7. like the others here  0 o .  . o 0 unlike the others here
8. coarse  0 o .  . o 0 smooth
9. like me  0 o .  . o 0 unlike me
10. prudish  0 o .  . o 0 broadminded
11. tolerant  0 o .  . o 0 intolerant
12. unpleasant  0 o .  . o 0 pleasant

CRS2
APPENDIX F (CONTINUED)

We'd like you to judge the assigned group member AS HE REALLY APPEARS TO ME NOW.

First, decide which side (word or phrase) is more appropriate; after deciding on which word or phrase you are going to mark, then, decide how much or to what degree you feel this way and -

Circle: 0 - when you feel very much this way
       o - when you feel somewhat this way
       . - when you feel only slightly this way

Try to be frank and rate this same person the way you feel about him at this moment.

Right now I feel he is:

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APPENDIX G

SCORING PROCEDURE FOR THE
CONFEDERATE RATING SCALE

Each item is scored on a 1 to 7 point scale (the middle point 4 is excluded). The scoring procedure follows the form used in Appendix B.

The order of item presentation and the initial pole presented have been altered on each of the three forms of the CRS, though the scoring procedure is identical for each CRS form.

On the CRS, the following items are presented with the positive pole stated first: 1, 3, 5, 7, 9, 11. The remainder of the items begin with the negative pole.

A maximum score of 84 denotes the most favorable evaluation of the confederate; the minimum score of 12 denotes the most negative confederate evaluation.
APPENDIX H

PICTURE CHOICE SETS FOR THE SIX EXPERIMENTAL TRIALS

Subject 1

Name (please print) __________________________________________

Date ________________________________________________________

Time ________________________________________________________

Picture Number 1

Put an "X" in the space below that most nearly describes your feelings about what was in your section of this picture.

( ) boy sitting on a bench reading a book

( ) two children on a bench pushing each other

( ) girl sitting on a bench reading a book

( ) child sitting on a bench eating candy

Picture Number 2

( ) two children under tree fighting over an apple

( ) girl under tree swinging on a swing

( ) woman helping up a fallen child under swing

( ) boy under tree swinging on a swing
APPENDIX H (CONTINUED)

Subject 1

Picture Number 3

( ) boy at a desk sneaking candy into his mouth
( ) boy at a desk drawing with large crayons
( ) boy at a desk poking boy in front of him with pencil
( ) girl at a desk drawing with large crayons

Picture Number 4

( ) two doctors looking at a metal chart
( ) nurse holding towel on patient's forehead
( ) two nurses looking at a metal chart
( ) nurse drawing blood from patient's arm

Picture Number 5

( ) clown tripping one of the paraders
( ) drum majorettes marching in a parade
( ) clown comforting a lost crying child
( ) boy scouts marching in a parade

Picture Number 6

( ) two women looking at bears playing in water
( ) woman comforting a frightened child watching bears
( ) two men looking at bears playing in water
( ) two children competing for a space to watch bears
APPENDIX H (CONTINUED)

Subject 2

Name (please print)__________________________________________________________

Date______________________________________________________________________

Time_______________________________________________________________________

Picture Number 1

Put an "X" in the space below that most nearly describes your feelings about what was in your section of this picture.

( ) boy standing to side of kitchen stove

( ) woman near kitchen stove feeding child bread

( ) girl standing to side of kitchen stove

( ) two children near kitchen stove pulling at bread

Picture Number 2

( ) two children fighting in a garden

( ) two girls weeding in a garden

( ) two children eating in a garden

( ) two boys weeding in a garden

Picture Number 3

( ) girl at blackboard drawing with chalk

( ) teacher helping boy at blackboard hold chalk

( ) boy at blackboard drawing with chalk

( ) girl at blackboard grabbing someone's chalk
APPENDIX H (CONTINUED)

Subject 2

Picture Number 4

( ) nurse giving bed patient an injection
( ) two doctors gesturing with their arms
( ) nurse feeding bed patient some liquid
( ) two nurses gesturing with their arms

Picture Number 5

( ) parade float showing group of male athletes
( ) parade float showing nurses treating soldiers
( ) parade float showing group of beauty queens
( ) parade float showing a combat battle scene

Picture Number 6

( ) woman giving child large cone of cotton candy
( ) two men standing in line at refreshment stand
( ) two children fighting over large cone of cotton candy
( ) two women standing in line at refreshment stand
APPENDIX H (CONTINUED)

Subject 3

Name (please print)__________________________________________________________

Date_______________________________________________________________________

Time_______________________________________________________________________

Picture Number 1

Put an "X" in the space below that most nearly describes your feelings about what was in your section of this picture.

( ) woman near window feeding a baby
( ) two girls looking out of a window
( ) two children fighting near a window
( ) two boys looking out of a window

Picture Number 2

( ) boy talking to man at a picnic table
( ) two children fighting over cake at a picnic table
( ) girl talking to woman at a picnic table
( ) woman feeding child cake at a picnic table

Picture Number 3

( ) two children competing for milk in teacher's hand
( ) two girls standing in front of teacher's desk
( ) teacher giving child a carton of milk
( ) two boys standing in front of teacher's desk
APPENDIX H (CONTINUED)

Subject 3

Picture Number 4
( ) nurse standing near a hospital bed
( ) surgeon holding scalpel above a patient
( ) doctor standing near a hospital bed
( ) nurse comforting patient on operating table

Picture Number 5
( ) girl helping marcher adjust his uniform
( ) some small boys twirling batons
( ) two boys poking each other with batons
( ) some small girls twirling batons

Picture Number 6
( ) boy looking at animals in a cage
( ) attendant pushing animals with a pole
( ) girl looking at animals in a cage
( ) attendant feeding animals from a pail
APPENDIX H (CONTINUED)

Subject 4

Name (please print)______________________________________________

Date___________________________________________________________

Time___________________________________________________________

Picture Number 1

Put an "X" in the space below that most nearly describes your feelings about what was in your section of this picture.

( ) two girls seated on chairs near fireplace
( ) woman cuddling baby on lap near fireplace
( ) two boys seated on chairs near fireplace
( ) two children fighting over a poker near fireplace

Picture Number 2

( ) boy pushing smaller child into a pool
( ) two boys looking down into a pool
( ) two children near pool eating ice cream
( ) two girls looking down into a pool

Picture Number 3

( ) two boys washing paint brushes at sink
( ) teacher giving boy drink of water at sink
( ) two girls washing paint brushes at sink
( ) boy shoving another boy away from sink
APPENDIX H (CONTINUED)

Subject 4

**Picture Number 4**

( ) hospital visitor giving patient a box of candy
( ) doctor talking to man who is visiting a patient
( ) nurse looking at patient who is missing an arm
( ) nurse talking to a woman who is visiting a patient

**Picture Number 5**

( ) parade float depicting group of girl scouts
( ) parade float depicting Japanese judo fighters
( ) parade float depicting group of boy scouts
( ) parade float depicting nurses feeding orphans

**Picture Number 6**

( ) boys trying to hit some swans with branches
( ) boys watching swans floating in a pond
( ) woman giving child some soda near swan pond
( ) girls watching swans floating in a pond
APPENDIX I

PICTURE EVALUATION SHEET

Put an "X" in the one space below that most nearly describes your feelings about the theme and the psychological mood of the people in this set of three pictures.

The men, women, and children in these pictures:

( ) appeared not to be in contact with each other—each seemed to be living apart from the others.

( ) appeared to stand out as distinct individuals in harmony with one another and with the scene as a whole.

( ) appeared not to stand out as distinct individuals—they seemed to depend on the others for their identity.
The men, women, and children in these pictures:

( ) appeared interested in and committed to what they were doing—as if they knew who they were and where they were going.

( ) left me with no impressions about the mood of these pictures.
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BIBLIOGRAPHY (CONTINUED)


