

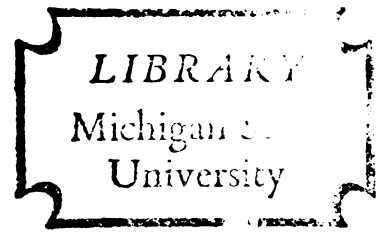
COMPLEXITY-SIMPLICITY AS A DIMENSION
IN IDENTITY FORMATION

Dissertation for the Degree of Ph. D.

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CAROLINE S. KIRBY

1977



This is to certify that the

thesis entitled

**Complexity-Simplicity as a
Dimension in Identity Formation**

presented by

Caroline S. Kirby

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Psychology

A handwritten signature in cursive script, appearing to read "M. Heles", written over a horizontal line.

Major professor

Date February 21, 1977

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ABSTRACT

COMPLEXITY-SIMPLICITY AS A DIMENSION IN IDENTITY FORMATION

By

Caroline S. Kirby

This study investigated the relationships between complexity-simplicity and three indicators of identity: ego identity, identity status, and resolutions of psychosocial stage crises. A random sample of 203 college junior and senior males was first administered the Barron Complexity Scale (BCS) and the Simmons Identity Achievement Status Scale (IAS) to determine whether complexity-simplicity and ego identity are independent attributes within persons. The prediction of independence was confirmed by a r of .004. Using an extreme groups design, 60 Ss representing high and low scores on both the BCS and IAS were interviewed and the interviews scored by two judges using James Marcia's (1964) procedure for determining identity statuses. Complexity at high levels of ego identity was associated with the Identity Achievement and Moratorium identity statuses. Simplicity was a characteristic of the Foreclosure status. Low ego identity was related to the Identity Diffusion status. These same

60 Ss were administered Constantinople's Inventory of Psychosocial Development (IPD) and the Marlowe-Crowne Social Desirability Scale (SDS). Partial correlations between the BCS and adjusted resolution scores for the six psychosocial stage crises measured by the IPD, with SDS partialled out, showed significant negative relationships between complexity and Identity resolution, and between complexity and Intimacy resolution. The implications of the findings were discussed.

COMPLEXITY-SIMPLICITY AS A DIMENSION
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By

Caroline S. Kirby

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To Laurel and Ken, who waited

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Two roads diverged in a yellow wood,
And sorry I could not travel both . . .

Robert Frost
"The Road Not Taken"

INTRODUCTION

The process of identity formation is said to occur during late adolescence when the young person readies himself to leave his dependent state and enter the world as a self-sufficient adult. Among those who have examined this process, Erik Erikson (1959, 1963, 1968) has been the most influential. Erikson saw identity as the integration a late adolescent achieves, primarily at the unconscious level, of past developmental gains and future potentialities in a way that brings recognition and acceptance from society, and through which the individual can have a reciprocal relationship with the world. A number of investigators have attempted to operationalize Erikson's concept of identity. Some have merely demonstrated that the ego identity-identity diffusion polarity exists, showing that ego identity is related to measures of adjustment, positive self-concept, and vocational commitment, while identity diffusion is related to indices of maladjustment. Marcia (1964) developed a scoring scheme to identify four points along the ego identity-identity diffusion continuum; his scheme has had a generative effect among investigators seeking to study identity

formation among college students (Donovan, 1970; Orlofsky, Marcia, & Lesser, 1973; Podd, Marcia, & Rubin, 1968; Simmons, 1970; Waterman, Geary, & Waterman, 1974; Waterman & Waterman, 1970, 1971, 1972; Waterman, Buebel, & Waterman, 1970). These studies have demonstrated that identity consolidation does take place during the four years in college, and that those who had successfully resolved prior developmental tasks tend to move toward identity resolution more readily than those with earlier unresolved conflicts.

Erikson equates ego identity with psychosocial maturity and specifies that the person has come to terms not only with himself, but with his environment as well. His identity is defined in terms of the social roles he has selected through which to express his individuality, and he receives validation of his identity by others' recognition and acceptance of his way of being and relating to the world. The most important role for many, especially for males, is the occupational role.

The healthily maturing individual, in the Eriksonian sense, presupposes a benevolent and responsive society that provides the growing young person with the affirmative influences he needs as he is searching out his way of being, without making excessive demands for a premature closure on identity. This, in reality, is not the case. Too often, society's demands are for the young

person to declare his occupational membership early and to fit into a time schedule and a role definition which requires the person to adapt and conform, at the expense of establishing his own individuality. A mature and highly independent person may therefore choose not to define his identity in terms of an occupational role, but may arrive at an integration which centers around his own sense of self, apart from any social role he may take on. Such a person would be characterized by the tentative nature of his career decisions, tentative not because he is afraid to commit himself, but because he recognizes that the occupational role is only an outer clothing for a more vital core that grows and changes.

Writers on today's social changes and their implications for the future (e.g., Toffler, 1970; Leonard, 1972; Gross & Osterman, 1972) bring to our awareness that those who fit themselves into the traditional social and occupational roles may find themselves maladapted in the not too distant future. The implication is that young people need to stay open and flexible, and to grow with the changes that are occurring. In other words, Erikson's psychosocial criterion for ego identity, that the young person find a "niche in some section of his society, a niche which is firmly defined and yet seems to be uniquely made for him," (1959, p. 66) does not hold as a prerequisite for a mature identity in society as it is today. Among his male college upperclass subjects, Marcia (1964)

found that ego identity was high among those who had resolved or were resolving the identity crisis even when they had not yet committed themselves to an occupational role. Donovan (1970) found that his occupationally and ideologically uncommitted but mature subjects were the most interpersonally active and creative in his sample. These views and findings, and other research results that have raised questions about Erikson's formulations on identity (Katz, 1968; Douvan & Adelson, 1966; Orlofsky, et al., 1973) seem to point to a need for additional unifying concepts that would help to bring together some of the discrepant or unexplained data on identity formation.

The dimension of complexity-simplicity, as delineated by Barron (1963) may be such a variable. This variable was discovered through factor analysis of a 400 item nonverbal instrument, and in subsequent studies has proven to cut across the dimension of adjustment-maladjustment. The correlates of this variable, particularly those of social nonconformity vs. conformity, openness to diverse stimuli and a resistance to premature closure vs. a constrictedness and a dislike for disorder, and a pessimistic vs. an optimistic view of the future, seem to be relevant to how a person goes about forming his identity.

This study attempts to explore this dimension of complexity-simplicity as it relates to certain currently popular operational measures of identity, and to examine its usefulness as an explanatory concept in the complex process of identity formation.

CHAPTER I

REVIEW OF LITERATURE

Erikson's Theory of Identity

Erik Erikson (1959, 1963, 1968) has proposed a theory of human growth which places the development of identity within the context of an epigenetic developmental schedule that spans the life of an individual. The task of establishing an identity falls during adolescence and is the fifth of eight psychosocial tasks which the ego has to master. Each task becomes a crisis when inner growth and a ripening of potentialities interact with pressures and sanctions from the social environment. Each successful resolution of a crisis brings a further sense of mastery and inner unity, and beginning with the critical first task of trust, accrues in a way that increases the probability of success with later tasks. Each unsuccessful resolution leaves the individual vulnerable at later stages to regressive pathology and has a negative accruing effect.

During the identity crisis:

. . . a time of life when the body changes its proportions radically, when genital puberty floods body and imagination with all manner of impulses, when intimacy with the other sex approaches and is, on occasion, forced on the young person, and when the immediate future confronts one with too many conflicting possibilities and choices. (1968, pp. 132-133)

the individual faces the formidable task of integrating his accumulated gains from the past with his potentialities for the future, in reciprocation with a society into which he will soon enter as a full-fledged member:

. . . the specific tasks of adolescence . . . are: to maintain the most important ego defenses against the vastly growing intensity of impulses . . .; to learn to consolidate the most important "conflict-free" achievements in line with work opportunities and to resynthesize all childhood identifications in some unique way, and yet in concordance with the roles offered by some wider section of society. . . . (1956, p. 67)

Erikson includes here both the biological aspect of identity formation and the psychosocial. With regard to the latter, he places the adolescent's search for identity in the context of social and evolutionary change. The young person, not wanting to be limited by his childhood identifications with his parents, and by the mistakes of previous generations, often rejects parents and authorities in search for superidentities and an ideological framework which give form to a sense of unlimited possibilities for the future:

Psychosocial identity transcends mere "personal" identity, that is, the knowledge of who you are. Adolescence, as you can see all around us, most

reconnects human past and human future. . . . Adolescents have always been especially open to what is now called consciousness-expansion in the direction of physical, spiritual, and social experience. Their cognitive capacities and social interests are such that they want to go the limit of experience before they fit themselves into their culture and fit their culture to themselves. . . . Of course, the more a culture gives free choices and decisions as to who one is going to be, the more open conflict is aroused. (Evans, 1967, p. 37)

To accomplish the task of identity formation, society affords the adolescent a psychosocial moratorium, a:

. . . more or less sanctioned intermediary period between childhood and adulthood . . . during which a lasting pattern of "inner identity" is scheduled for relative completion. (1956, p. 66)

The successful resolution of the identity crisis is termed ego identity:

The integration now taking place in the form of the 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 identifications led to a successful alignment of the individual's basic drives with his endowment and his opportunities. . . . The sense of ego identity, then, is the accrued confidence that one's ability to maintain inner sameness and continuity . . . is matched by the sameness and continuity of one's meaning for others. (1959, p. 89)

and is most clearly manifested in a commitment to an occupation or career, and a personal ideology:

Man, to take his place in society must acquire a "conflict-free," habitual use of a dominant faculty, to be elaborated in an occupation; a limitless resource, a feedback, as it were, from the companionship it provides, and from its tradition; and finally, an intelligible theory of the processes of life. . . . (1956, p. 65)

A failure to resolve the identity crisis results in
identity diffusion:

. . . which can express itself in excessively prolonged moratoria, or in repeated impulsive attempts to end the moratorium with sudden choices--and then deny that some irreversible commitment has already taken place, or sometimes in severe regressive pathology. . . . (1968, p. 246)

Briefer periods of identity diffusion are a normal part of the identity crisis.

Studies on Identity Formation Among College Students

A number of investigators have attempted to operationalize Erikson's key constructs and to test various aspects of his theory of identity. These studies have been largely limited to the college population, and a number of them have used male subjects only.

Bronson (1959) sought to show that identity diffusion is a personality variable with several measurable and intercorrelated manifestations. Extrapolating from Erikson's psychopathological derivation of this construct, Bronson saw identity diffusion as "a condition of psychological fluidity and of weakened repressions" (p. 414) which characterizes normal adolescents who are passing the period of identity crisis. From Erikson's clinical descriptions, he derived four characteristics of identity diffusion which he hypothesized would be interrelated:

- (1) lacking a sense of continuity with the past; (2) high degree of inner tension and anxiety; (3) uncertainty

about one's dominant personal characteristics; and (4) temporal instability of self-perceptions. The first two were measured by judges' ratings of interviews; and the second two were assessed by a semantic differential technique. Using 44 female and 4 male volunteer college students as his subjects, he found significant intercorrelations among the four measures even when test-retest stability was partialled out (r 's ranging from .47 to .71). He concluded that his results give support to the construct of identity diffusion as a variable among normal late adolescents.

Block (1961) focused on Erikson's definition of ego identity as "the accrued confidence that one's ability to maintain inner sameness and continuity . . . is matched by the sameness and continuity of one's meaning for others" (Erikson, 1959, p. 69) from which he derived the empirically established concept of interpersonal consistency. He hypothesized that interpersonal consistency is curvilinearly related to maladjustment, i.e., that excessive inconsistency, or "role variability," and excessive consistency, or "role rigidity," are both maladaptive and contraindicative of ego identity. Interpersonal consistency was measured by having the subjects rank a list of 20 adjectives eight different times, describing their behavior in relationship with eight significant others. Maladjustment was measured by using an empirically

derived and independently validated scale of the California Psychological Inventory, called the Psychoneuroticism Scale. The subjects were 41 college students selected by his students in a class on factor analysis-- Block does not further describe his subjects and herein lies the weakness of his study. Instead of a curvilinear relationship, Block found that interpersonal consistency was related in a linear fashion to maladjustment (r of $-.52$) i.e., that role rigidity was negatively related to maladjustment. Block claimed that his hypothesis of curvilinearity was essentially untested because his small sample of college upperclassmen would most likely not have included the extreme end of role rigidity. Although Block's study has not been replicated, later studies by Marcia (1964) and others have essentially established his thesis. Role rigidity is a characteristic of Marcia's Foreclosure status, and role variability is a characteristic of the Identity Diffusion status. Both statuses are associated with low ego identity and reflect maladjustment.

Stark and Traxler (1974) did a cross sectional study of 507 midwestern college males and females to demonstrate a progression toward ego identity over age. They divided their subjects into two age groups, and predicted that those within the 17 to 20 range would show more identity diffusion than those within the 21 to 24

age span, who would in turn show more ego identity. These polar opposites were measured by low and high scores, respectively, on the Dignan Ego Identity Scale. Their results verified this prediction, which the authors saw as providing empirical support for Erikson's conception of identity crisis. They also found that females showed less diffusion than males within each age group, and that anxiety, as measured by the IPAT Anxiety Scale, was related to identity diffusion ($r = -.36$, $p < .01$).

Constantinople (1969), in her attempt to establish norms for identity development among college students, studied large samples of males and females from each class level using both cross sectional and longitudinal data from a total of 952 subjects. These were full-time undergraduates at the University of Rochester, representing middle- and upper-middle-class families in New York state. Although the majority were liberal arts majors, approximately a third were expected to go on to medical school or to graduate with a degree in the natural sciences. The follow-up studies were carried out by mail, resulting in an attrition of up to two-thirds in the final study; this will have to be taken into account in interpreting the longitudinal data.

The single measure used was a seven-point self-rating scale on items relating to the polar traits of the first six of Erikson's eight stages of psychosocial

development. Each polar trait constituted a subscale, e.g., the first stage was measured by both a Basic Trust scale and a Basic Mistrust scale, so that the entire instrument consisted of 12 subscales. The cross sectional data would provide norms by sex and by class for the extent of crisis resolution and crisis unresolution for each of the six stages. Comparison by class would give an indication of whether there is a progression toward resolution and a diminishing rate of unresolution over year in college, i.e., over age and college experience. The longitudinal data would give further corroboration of rate of resolution or unresolution over time.

Constantinople found (1) that there were consistent increases in the successful resolution of identity, in both the cross sectional and longitudinal data, from freshman year to senior year for both males and females; (2) Males showed a decrease in diffusion, but females showed an increase in diffusion, over the four years; (3) There were significant decreases in Mistrust, Guilt and Inferiority, and a significant increase in Industry in the cross sectional data across the college years; (4) There were no significant differences over the college years in either the cross sectional or longitudinal data for Basic Trust, Autonomy, Shame and Guilt, Initiative, Intimacy, and Isolation.

Since the differences found in Basic Mistrust, Guilt, Industry and Inferiority were from the cross sectional data only, it cannot be concluded that persons resolve these earlier conflicts over the college years. The more probable explanation is that there is an attrition of persons high on Mistrust, Guilt and Inferiority, and low on Industry. Viewed thusly, the only finding of developmental significance in Constantinople's study is that identity resolution increases over the college years, and that there are sex differences in the extent of identity resolution. These findings are similar to those of Stark and Traxler (1974) with one important difference: the latter found that females showed less identity diffusion in both the younger and older groups, whereas Constantinople found diffusion to increase after the freshman year. This may mean that Stark and Traxler's groupings of age masked the progression of diffusion among females, and/or that the Dignan Ego Identity Scale does not measure the same thing as does Constantinople's inventory, or that different populations were sampled.

Munley (1975) used Constantinople's Inventory of Psychosocial Development and Dignan's Ego Identity Scale to check whether resolution of prior psychosocial crises and ego identity are related to vocational choice behavior and maturity. He found among his 125 male college students that subjects with adjusted vocational

choices showed stronger ego identity and a higher level of resolution of the first six psychosocial crises, than did the subjects who were undecided in their vocational choices. "Adjusted vocational choice" was measured by the degree of agreement between aptitude level (measured by the College Board Scholastic Aptitude Test), interest pattern (measured by the Strong Vocational Interest Blank) and the subject's vocational choice. He also found that vocational maturity as measured by the Crites Career Maturity Inventory was related positively to level of psychosocial development and ego identity. These results lend support for the construct validity of the two identity measures and imply that vocational development parallels psychosocial development.

The operational procedure that has generated the largest number of studies on identity formation has been Marcia's (1964) scheme for assigning an identity status to persons in their late adolescence who are at different stages in their achievement of an identity. From Erikson's theory, Marcia abstracted out the two variables of crisis and commitment, and the two tasks of choice of occupation and formulation of ideology. He defined "crisis" as a decision period when the individual "seems to be actively involved in choosing among meaningful alternatives" (p. 23). "Commitment" was defined as "the degree of personal investment the individual expresses

in a course of action or belief" (p. 24). Marcia developed a structured interview for eliciting information on an individual's occupational choice and his religious and political beliefs and a scoring procedure which assigned a status for occupation and for ideology (religion and politics combined). Those who had passed a crisis and were firmly committed to an occupation and an ideology were assigned the status of Identity Achievement (plus crisis, plus commitment). Those who did not experience a crisis, yet were firmly committed, were scored as Foreclosure (minus crisis, plus commitment). Those who were presently in crisis and were either uncommitted or only vaguely committed were given the status of Moratorium (plus crisis, minus commitment). Those who did not experience a crisis period and lacked a commitment were assigned the status Identity Diffusion (minus crisis, minus commitment).

Marcia first conceived of these statuses as four concentration points on a continuum between ego identity and identity diffusion with the order as: Identity Achievement, Foreclosure, Moratorium and Identity Diffusion. Note that by placing Foreclosure before Moratorium, Marcia placed a heavier weight on commitment than on crisis. He found instead that the Moratorium group scored very close to the Identity Achievement group on an independent measure of ego identity, while the

Foreclosure group scored closer to the Identity Diffusion group. This finding has been verified in every subsequent study using Marcia's identity statuses. What this means is that crisis is the more crucial variable in differentiating high from low ego identity. This makes better theoretical sense: the person who undergoes the identity crisis is developmentally further advanced than the person who is avoiding the developmental tasks at this level.

A second unexpected finding was that the four identity statuses, rather than falling in a continuum on related variables, appeared to be discrete groups with distinctive characteristics. This finding has also been corroborated in subsequent studies.

The distinctive characteristics which Marcia found for each of the identity statuses, together with the findings of other studies, are summarized in a section that follows.

Donovan (1970) used a case study approach to study Marcia's identity statuses in depth, with the aim of discovering what was responsible for the differences in identity formation that these different groups represented. Taking his 22 undergraduate students in an unstructured "T group" class, he obtained information on developmental history, psychodynamic functioning, and on interpersonal style. Two important differences in sample and method between Donovan's and Marcia's

studies affect the comparability of results: (1) An elective course on interpersonal interaction would contain a highly selective group of students. Donovan found that his class consisted primarily of persons in the Moratorium status; he found no persons in the Identity Achievement category except for the two mature women in his class, both mothers in their 30's. Also, his sample consisted of females, while Marcia used only males. (2) The difference in method involves Donovan's modification of Marcia's unstructured interview and scoring procedure. Because his sample included females, Donovan decided to add an interview section on "sexuality," feeling that this would add the dimension of interpersonal functioning which he felt would give a more accurate indication of a female's identity level. Also, he added a fifth identity status of "Moratorium-Diffusion" to separate out a more maladjusted subgroup from the Moratorium classification. Donovan's findings were similar to Marcia's clinical impressions and are summarized in Table 2 (see p. 28). An important addition from his data are some of the healthy characteristics of the Moratorium group: this group "had experienced more, traveled more and had more sexual relationships than had most of the Ss. It seemed as if this activity had made them aware of a great deal and so even less likely to choose one course at the present" (p. 79). Their

approach in dealing with their occupational indecision was "to know the self and the world widely, rather than to seek a niche to twist into" (p. 79). The Moratorium subjects had strong and well-functioning egos. "It allows them to regress in order to explore themselves and their feelings about what they see around them. It does not loosen its hold on reality when it does this, however" (p. 85). These subjects were also found to be the most creative and interpersonally active in class.

Waterman and Waterman and their associates have done a number of studies, using Marcia's categorization of identity statuses, to follow college students and their identity development over the college years.

In their first report of a longitudinal study involving 92 male college freshmen at Rennselaer Polytechnic Institute, the Watermans (1971) found that changes out of an identity status by the end of the freshman year was a common event: 75% changed their status either in occupation and/or ideology. There were a significant number of shifts out of the Identity Diffusion status and into the Moratorium status for occupation, a trend that is consistent with Erikson's notions of identity development, and with common expectations of the effect of the college environment. This did not hold true for ideology, where there was a significant number of shifts into the Identity Diffusion status,

indicating that students were claiming a lack of commitment, yet were avoiding or not dealing with these questions. The authors explained this to mean that students tend to work on one area at a time, and that occupational concerns were paramount to these engineering students in their freshman year. It would be reasonable to expect that this pattern may not be true of students in other fields, e.g., liberal arts.

The authors also tested their hypothesis that students who shifted out of a status group would tend to show personal characteristics which were less common for members of that group. They examined this for the two commitment categories of Identity Achievement and Foreclosure. Using two scales from the College Student Questionnaire, they found that there was a tendency for students who dropped out of the Identity Achievement status to score lower on "family independence" and "cultural sophistication," and those who shifted out of Foreclosure to score higher on these two scales, than did the remainders in each of these statuses. Again, this would be expected from theory. The one trend which seemed to be suggested by the data, but which was left unmentioned by the authors, was that relatively more students remained in the Foreclosure status than in the other three groups, suggesting that Foreclosure students were the most stable and unchanging in their sample of engineering freshmen.

Waterman, Geary, and Waterman (1974) reported on the follow-up study of the same group of freshmen at the end of the senior year. Data for 47 seniors are given, and this sample differed from the freshman sample in that there was a significant attrition of those who were in the Moratorium status for occupation and a significant retention of those who were in the Foreclosure status for occupation. No significant differences were found between freshman and senior years in composition of status groups for ideology.

The authors found a developmental shift toward Identity Achievement in both occupation and ideology. All of the students who were in moratoria moved out of that status. Diffuse students changed the least, and foreclosed students changed in ideology but not in occupation.

Waterman, Buebel, and Waterman (1970) completed two studies to investigate the relationship of ego identity to resolution of prior psychosocial crises. The subjects for these studies were the same engineering freshmen who participated in the longitudinal studies reported above. In the first study, level of ego identity was assessed by Marcia's interview procedure and classifications. Identity Achievement and Moratorium statuses were combined to form the high ego identity group, and Foreclosure and Identity Diffusion statuses were combined into the low ego identity group. Ego identity was

compared to measures of the first and second psychosocial crisis resolutions: basic trust and autonomy. Rotter's Interpersonal Trust Scale was used as a measure of the former, and his Internal-External Control Scale was used as the measure for autonomy. They found a significant F at the .05 level for autonomy, but insignificant differences for trust.

In the second study, the authors used Constanti-nople's Inventory of Psychosocial Development to measure the different components of Erikson's polar variables in his first five developmental stages. Correlations were computed between the Identity score and the scores for each of the antecedent components. They found all the correlations to be significant: Basic trust: .43; Autonomy: .32; Initiative: .24; and Industry: .24. The authors concluded that their studies give support to Erikson's hypothesis that successful coping with the identity crisis is related to successful resolutions of prior developmental crises.

In another study of the same engineering students, Waterman and Waterman (1972) followed up the 92 freshmen at the end of their sixth semester to see whether changes in major program or withdrawal from college were differentially related to the four identity status groups. They found that 80% of the Moratorium group changed plans, while only 30% of the students in the other three

categories changed. When they examined the academic performance of the students who withdrew from college, they found that the Identity Achievement and Moratorium groups showed satisfactory grade point averages, while the Foreclosure and Identity Diffusion groups showed failing grades. This was not true among the students who stayed in college, for there were no significant group differences in grades among the remainders.

Orlofsky, Marcia, and Lesser (1973) studied 53 college upperclass males to determine whether resolution of the identity crisis would be related to successful coping with the intimacy-isolation crisis. They used Marcia's structured interview and classification procedure to establish the identity statuses, and a similar procedure to determine the intimacy statuses of the subjects. In addition to Marcia's four statuses of Identity Achievement, Moratorium, Foreclosure, and Identity Diffusion, these authors added a fifth status which they called "Alienated Achievement." This was a subgroup of Identity Diffusion, made up of individuals who were uncommitted to an occupation, but had a firm ideology which dictated a withholding of commitment--"almost as if they have formed an ideological commitment that precluded an occupational one" (p. 212). They found that the Alienated Achievement group scored highest on intimacy on two separate measures, and they also scored highest on the Edwards Personal

Preference Schedule for need Autonomy and need Affiliation. They scored lowest on the Edwards Social Desirability Scale, suggesting a lack of significant defensiveness and a low need for approval. The authors draw a picture of these individuals as "self-reliant and defiant toward the social order and conventional ways of doing things," as high in ego strength, and as placing value on interpersonal involvement, and of devaluing occupational commitment. Other findings were that the Identity Achievement group scored almost as high as the Alienated Achievements on Intimacy, that the Moratorium subjects were generally found to be preintimate and that both Foreclosure and Identity Diffusion subjects were in the three lowest intimacy statuses: pseudointimate, stereotyped relationships, and isolate. They also found that Foreclosure subjects scored lowest on need for Autonomy and highest on social desirability, reflecting their need for approval.

Summary of Research Data on Ego Identity and Identity Statuses

Table 1 summarizes the data from studies which have attempted to identify the characteristics associated with the polar ends of the ego identity-identity diffusion dimension. In the list of characteristics associated with ego identity, we can see these aspects of healthy growth: resolution of earlier developmental crises, a definite sense of self and positive feelings about the self,

Table 1
Summary of Empirically Derived Characteristics of Ego Identity and Identity Diffusion

Ego Identity associated with:	Identity Diffusion associated with:
^a Trust (Baker, 1964; Waterman, 1970) mf Autonomy (Simmons, 1973; Waterman, 1970) m Initiative (Waterman, 1970) m Industry (Waterman, 1970) mf Self-regard (Simmons, 1973) m Self-acceptance (Bell, 1969) m Positive self-concept (Bell, 1969; Rosenfield, 1973) mf Endurance (Marcia, 1964; Simmons, 1973) mf Inner directedness (Simmons, 1973) mf Time competence (Simmons, 1973) mf Negative relation with succorance (Simmons, 1970) m Negative relation with maladjustment (Pable, 1964) mf Vocational commitment (Bell, 1969; Davis, 1964; Marcia, 1964; Munley, 1975) m Vocational maturity (Munley, 1975) m Intimate and preintimate (Orlofsky, 1973) m Home environment (Pable, 1964) Father perceived as dominant Moderate degree of control Parental affection Both parents similar in behavior toward adolescent	 ^b Lacking trust in self and world (Baker, 1964; Donovan, 1970) mf Low self-esteem (Donovan, 1970) mf Perceiving self as insecure, prone to anxiety (Pable, 1964; Bronson, 1959) mf Emotional disturbance (Donovan, 1970) m Vocationally undecided (Munley, 1975) m Vocationally immature (Munley, 1975) m Isolated (Orlofsky, 1973) m Home environment: (Pable, 1964) Perceiving mother as more dominant Parental over- and under-control Mother more often intrusive and demanding

^a_m = male subjects only

^b_{mf} = male and female subjects

effective management of the self, developing relationships with the world and contemporaries, and an environmental and family history that was conducive to independent growth. The characteristics associated with identity diffusion are all indicative of maladjustment: early unresolved conflicts as evidenced by mistrust and a disturbed relationship with mother, a disturbed sense of self and an absence of healthy relationships, and an inability to have a functional relationship with the world. The ego identity-identity diffusion dimension appears to be related to psychological health vs. maladjustment and to developmental maturity vs. developmental immaturity. These findings seem to translate in empirical terms what Erikson has formulated theoretically.

The several studies cited in the preceding pages have given evidence that the four identity statuses identified by Marcia do not fall on a continuum between psychological health and maladjustment. The Identity Achievement and Moratorium statuses are both associated with high ego identity, and the Foreclosure and Identity Diffusion statuses with low ego identity. To a certain extent, the statuses reflect stages in the process of identity formation, especially among college students who tend to be in a fluid state of development. Thus a freshman may have entered college in a foreclosure status, then shift to Identity Diffusion as he begins

to question an identity which he had adopted and which does not serve him in an expanded environment, then move on to Moratorium as he begins more actively to explore the alternatives he feels are open to him, and arrive at Identity Achievement when he settles on his occupation and firms up on some acquired values which he feels define him. Used in this way, the identity statuses help to delineate the process of identity development over a period of time. In another sense, the four status designations reflect more permanent personality characteristics and describe four types of people, or as Marcia has stated, four "styles of meeting the identity crisis" (1964, p. 4). Thus, some of the schizoid Identity Diffusion individuals will be destined to live out life in a diffuse state, and some of the creative and individualistic Moratorium individuals will never equate an occupation with their identities. These two ways of looking at identity statuses raises the question of whether the statuses are stages in a process, or personality types, or whether we are lumping two different things within a unitary concept. It is hoped that the results of this study will shed some light on this question, which will be discussed in detail after the data analysis is completed. Table 2 summarizes both the empirically derived characteristics and the clinical descriptions of each of the four identity statuses.

Table 2

Empirical and Clinical Descriptions of Identity
Status Groups

Identity Achievement (IA)

Definition: Experienced a crisis period and made a resolution on his own terms; committed to an occupation.

Empirical Descriptions:

- m^a (Marcia, 1964)
 - Found more frequently among upperclassmen
 - Highest scores on ego-identity scale
 - Performed better than others under stress
 - Perseverance
- m (Waterman, et al., 1974)
 - Most stable group over four years
- m (Lavoie, 1968)
 - Found more frequently among those from free^b high school environment

Clinical Descriptions:

- m (Marcia, 1964)
 - Makes his decisions independent of parents' values
 - Would not be overwhelmed by sudden shifts in his environment or by unexpected responsibilities
 - Internal locus of evaluation
- mf^a (Donovan, 1970)
 - Older, more mature, more stable
 - Resolved most conflicts with authority and intimacy
 - Not as creative or energetic as M

Moratorium (M)

Definition: Presently in a crisis period; commitments vague and general.

Table 2 (Continued)

 Empirical Descriptions:

- m (Marcia, 1964)
Ego identity scale scores very close to IA
Variable in performance of intellectual task
under stress
- m (Podd, et al., 1968)
Ambivalent view toward authority
- m (Lavoie, 1968)
Found most frequently among those from
restricted^b high school environments

Clinical Descriptions:

- m (Marcia, 1964)
Gives appearance of an active struggle to make
commitments
Inner preoccupation with what he perceives at
times to be unresolvable questions
In conflict between parents' values, society's
demands, and own capabilities
At worse, paralyzed by conflict
At best, verbally expressive about conflicts,
utopian in ideological outlook, intelligent
- mf (Donovan, 1970)
Seems most concerned with active mastery of the
world and of the self
Strong, well-functioning egos
Can regress without losing hold on reality
More traveled and widely experienced
Most creative and insightful
Most active interpersonally
Difficulty making commitments to other people
and to specific tasks and occupations
More sure of answers in ideology than occupation

Subgroup: Moratorium-Diffusion (Donovan, 1970)

More neurotic and less active in dealing with
the identity crisis

Table 2 (Continued)

Foreclosure (F)

Definition: Committed to an occupation without going through a real decision period. Accepted roles which parents intended for him. Values are those of parents or parent surrogates.

Empirical Descriptions:

- m (Marcia, 1964)
 - Scored midway between M and ID on ego identity scale
 - Scored highest on authoritarianism
 - Low freedom of movement
 - More defensive when negatively evaluated
 - Overestimated performance, unrealistic goal setting
- m (Waterman, et al., 1972)
 - If withdrew from college, left in poor standing
- m (Lavoie, 1968)
 - Found more frequently among those attending restricted college environment

Clinical Descriptions:

- m (Marcia, 1964)
 - Has not separated parents' goals for him from own personal goals
 - Beliefs adopted from authority persons
 - College experiences seen only as a confirmation of childhood beliefs
 - Rigid personality, would be threatened in situation when parental values nonfunctioning
 - mf (Donovan, 1970)
 - Highest grades
 - Difficulty with initiative
 - From homes emphasizing strict superego functioning, but with warmth and closeness
 - Problems with assertiveness and independence
 - Difficulty expressing sexual and aggressive feelings
-

Table 2 (Continued)

Identity Diffusion (ID)

Definition: Experienced no crisis or passed through a crisis; no commitment.

Empirical Descriptions:

- m (Marcia, 1964)
 - Lowest scores on ego identity scale
 - Lower self-esteem scores than others
 - More realistic and less defensive to failure than F
- m (Waterman, et al., 1972)
 - If withdrew from college, left in poor standing
- m (Orlofsky, et al., 1973)
 - Interpersonally isolated

Clinical Descriptions:

- m (Marcia, 1964)
 - Has neither decided on an occupation nor is much concerned about it
 - Has little conception of daily routine of occupations he mentions
 - Gives feeling that he would drop the occupation he states preference for if opportunities arose elsewhere
 - Either uninterested in ideology or takes a smorgasbord approach
 - At worst, ID shows disorganized thought processes, disturbed object relationships, and loosened ego boundaries associated with schizophrenia
 - At best, blithe, carefree, can "take or leave" both people and ideas
- mf (Donovan, 1970)
 - Lacks trust in self and world
 - Most emotionally disturbed
 - Reports feelings of "alienation," "inferiority," and "ambivalence"
 - "In one way or another . . . from beginning of their lives have felt that they do not fit" (p. 71)
 - Denial and projection most prominent defenses
 - Silent and withdrawn

Table 2 (Continued)

Subgroup: Alienated Achievement (Orlofsky, et al., 1973)

Scored highest on need Autonomy on Edwards
 Personal Preference Schedule
 Scored higher than other groups on need
 Affiliation
 Scored highest on Intimacy-Isolation scale
 (most intimate)

Clinical Descriptions:

Self-reliant and defiant toward the social order
 and conventional ways of doing things
 Equals IA in ego strength
 Bases his identity more on his style of relating
 to other people than on matters of occupa-
 tional and ideological choice. "It is as if
 he chooses to forego the identity crisis in
 favor of the intimacy crisis, his stance
 toward the latter becoming the basis of his
 identity" (p. 213)

^a_m = study limited to male subjects; mf = male
 and female subjects

^b Arbitrarily defined nonsectarian high schools
 and colleges as "free" or moratorium granting; Catholic
 institutions as "restricted" or moratorium withholding.

From an examination of the descriptions in Table 2, it is apparent that the Identity Achievement and Moratorium groups are developmentally more advanced and have higher ego identity than the Foreclosure and Identity Diffusion groups. The exceptions are the Moratorium-Diffusion subgroup, which probably should be classed together with Identity Diffusion because they are not actively in crisis, and the Alienated Achievement subgroup, which may be more properly placed within the Moratorium group because these individuals have apparently been active in their search for values, even when their focus has been on interpersonal relationships rather than on occupations or on ideology.

The four identity statuses can be more easily conceptualized by placing the two criteria of crisis and commitment in a two-way classification table, as in Table 3. Here we see the vertical axis (crisis) as having to do with level of ego identity, or with developmental maturity vs. developmental immaturity. The horizontal axis (commitment) seems to be related to closure vs. non-closure or openness, or to integration vs. preintegration or diffusion. One of the hypotheses that this study proposes to test is that complexity-simplicity is an underlying dimension of the horizontal axis.

Table 3
Two-Way Classification of Identity Status

		COMMITMENT	
		<u>Uncommitted</u>	<u>Committed</u>
CRISIS	<u>Post-crisis</u> or <u>Mid-crisis</u>	Moratorium	Identity Achievement
	<u>Pre-crisis</u>	Identity Diffusion	Foreclosure

The Complexity-Simplicity
Dimension

This dimension was identified in a factor analytic study of a test on preference for line drawings, which George S. Welsh was attempting to develop as a nonverbal psychiatric diagnostic instrument (Barron, 1963). Welsh found two bipolar factors which were orthogonal to each other: an acceptance-rejection factor (liking or disliking the drawing), and a complexity-simplicity factor (preference for asymmetrical or more complex drawings as opposed to preference for simple drawings with an obvious bilateral symmetry). Barron wondered whether this second factor might be predictive of artistic discrimination and proceeded to develop an art scale that discriminated artists from nonartists. When this scale was given to other nonartist samples, and the scores correlated with

other personality measures, a composite picture of the "complex" person and of the "simple" person emerged.

Table 4 gives a list of correlations between complexity-simplicity and a number of personality ratings and test scores for a sample of 40 graduate students who were part of an extensive study on psychological health carried out by the Institute of Personality Assessment and Research at the University of California (Barron, 1963). Positive correlations show a relationship with the complexity end, and negative correlations show a relationship with the simplicity end of the dimension.

Table 5 reproduces the summary given by Barron of the differences in figure preferences, art preferences, and adjective self-descriptions of the "complex" group (Group A) and "simple" group (Group S) from the same sample of 40 graduate students (Barron, 1963, p. 189).

Two points of interest are apparent from these data: (1) In the staff ratings of personality variables, there are positive and negative characteristics on both ends of the dimension. A look at some of the variables which were unrelated to either complexity or simplicity indicates also that personal effectiveness is not associated with either side of the dimension: Soundness, Positive Character Integration, Potentiality, Breadth of Interest, Intellect, Self-confidence, Vitality, and Drive. Barron reports that there were equal

Table 4

Correlations between Complexity and Personality Variables
for 40 Graduate Students

Ratings by research staff:

Deceitfulness: guile, subterfuge, duplicity, lack of frankness	.56
Personal tempo: rate of speech, quickness and intensity of expressive movement, general speed of response	.50
Impulsiveness: inadequate control of impulse, acting without thinking, lack of deliberation and judiciousness	.50
Originality: freshness of vision and creativity of thought; original approach to problems	.30
Verbal fluency: talkativeness, facility in conversation, use of varied vocabulary	.20
Likeability: personal reaction of the rater to the subject	-.27
Submissiveness: deference, willingness to be led, compliance, over-ready acceptance of authority	-.29
Adjustment: getting along with the world as it is, ability to fit in	-.31
Abundance values: sense of security and optimism regarding the future, absence of fears of deprivation, of being exploited, and of being cheated	-.34
Rigidity: inflexibility of thought and manner, stubbornness pedantry, firmness	-.35
Good judgment: common sense, sense of reality, objectivity	-.39
Constriction: overcontrol of impulse, undue inhibition, lack of spontaneity	-.39
Naturalness: freedom from pretense, being oneself	-.47

Test Scores:

Basic Good Taste (esthetic judgment)	.44
Turney Designs (artistic design ability)	.40
MMPI:	
Schizophrenia	.37
Psychopathic deviate	.36
F Scale	.36
Welsh Anxiety Index (overt anxiety)	.34
Hysteria	-.30

Table 5

Characteristic Art Preferences and Self-Descriptions of
Persons High in Simplicity (Group S) and in
Complexity (Group A)

Group S

In Figure Preferences

Preferring what is simple, regularly predictable,
following some cardinal principle that can be deduced
at a glance.

In Art Preferences

Preferring themes involving religion, authority,
aristocracy, and tradition.

In Adjective Self-Checks

Contented, gentle, conservative, patient, peaceable,
serious, individualistic, stable, worrying, timid,
thrifty, dreamy, deliberate, moderate, modest,
responsible, foresighted, conscientious.

Group A

In Figure Preferences

Preferring what is complex, irregular, whimsical.

In Art Preferences

Preferring what is radically experimental, sensational,
sensual, esoteric, primitive, and naive.

In Adjective Self-Checks

Gloomy, pessimistic, bitter, dissatisfied, emotional,
pleasure-seeking, unstable, cool, irritable, aloof,
sarcastic, spendthrift, distractible, demanding,
indifferent, anxious, opinionated, temperamental,
quick.

representations of "complex" and "simple" persons among those rated high in personal effectiveness and professional promise, and also for those rated low in these attributes. He concluded that there are effective and ineffective aspects on both sides of the complexity-simplicity continuum. (2) In the adjective check-list, "complex" persons described themselves with many more negative characteristics than did "simple" persons. Considering the finding just stated, this seems to mean that "complex" persons are more ready to see and more willing to report the negative aspects of their personality than are "simple" persons.

From these findings, and results from other samples, Barron provides a composite picture of the "complex" person as: more intensely expressive, expansive, and fluent in speech, original, having better artistic expression and esthetic judgment, having greater flexibility in thought processes, more impulsive and less repressed, open to diverse stimuli and resistant to premature closure, experiencing more anxiety, and being less submissive and socially conforming than the "simple" person. The composite "simple" person is better adjusted in the sense of adapting and conforming, and in his respect for authority and acceptance of the social order. He is more likeable, more optimistic, and has a trust that his basic needs will be met by external agents. His personal stability and balance may be partly based

on a constricted view of the world and a denial of the discordant. Complexity in the extreme is associated with negativism, an antisocial outlook, bitterness, disintegration, and despair. Simplicity in the extreme is associated with rigidity, stereotyped thinking, suppression of impulses, and a rejection of anything that threatens disorder.

There seem to be four key characteristics that differentiate the "complex" person from the "simple" person: (1) the first is a flexibility and fluidity as opposed to stability and preference for order. The "complex" person is challenged by diversity and asymmetry and is characterized by a "constant effort to integrate the inner and outer complexity in a higher-order synthesis" (Barron, 1963, p. 199). He resists premature closure in favor of a more elegant synthesis. The ineffective "complex" person seems to be handicapped by a failure of his synthesizing function, and an overriding pessimism, which results in disillusionment, apathy and disintegration. The "simple" person, on the other hand, tends to see order and balance in himself and his environment, and leans more in the direction of shutting out diversity so as to maintain his stability. The ineffective "simple" person can live comfortably only within an unchanging structure; he hangs on rigidly to a system or a mold which provides him with a sense of security. (2) A

second difference is in impulse expression and an openness to inner processes versus a constriction and suppression of impulses. The "complex" person is more open to regression and disorganization, and has a higher tolerance for anxiety. If he possesses good ego strength, his access to unconscious processes can result in creativity and a higher level of functioning; if not, to disorganized behavior. The "simple" person maintains his equilibrium by being less susceptible to inner and outer disturbances. He provides the stability needed for the continued functioning of any system or social order, but if too constricted, can prevent growth and change from occurring. (3) The third difference is a pessimistic vs. an optimistic outlook. "Complex" persons seem to lack the trust that enables the "simple" person to feel secure and optimistic about the future. Barron cites evidence that his "complex" subjects had a longer and more intense oral stage of development, and a slower social development during the early years than did his "simple" subjects. He conjectures that:

. . . originality evidenced in maturity is to some extent dependent upon the degree to which the person in early childhood is faced with a complicated relationship to the maternal source of supply, combined with his capacity to persist at and eventually to achieve some mastery of his earliest problem situation. The argument would be that this primitive experience of phenomenal complexity sets a pattern of response which results in slower maturation, more tentativeness about the final form of

organization, a resistance to early crystallization of the personality, and finally, greater complexity in one's view both of the outer and inner worlds.
(p. 193)

"Simple" persons scored higher in "abundance values," and were more natural and likeable. These qualities all manifest a kind of basic trust, while deceitfulness, a characteristic of the "complex," fits more closely with basic mistrust. (4) The fourth difference follows from the pessimism-optimism variable, and has to do with nonconformity vs. conformity. "Complex" persons seem to have a distrust for the social order and to rely on their own resources to get their needs met or to express their individuality. The "simple" person's trust enables him to go along with the social order and to accept a niche in society.

There are many parallels between the effective and ineffective levels of simplicity and complexity and the four identity statuses. The effective "simple" person maintains his equilibrium and finds his niche in society. He fits the Identity Achievement category. The effective "complex" person is creative, individualistic, and resists a niche. He sounds like the Moratorium individual, especially as described by Donovan (1970), and the Alienated Achievement individual described by Orlofsky et al. (1973). The ineffective "simple" person is rigid and constricted, much like the Foreclosure

individual. The ineffective "complex" individual is like the Identity Diffuse person in his mistrust and tendency toward apathy and disintegration.

CHAPTER II

STATEMENT OF THE PROBLEM

Complexity-simplicity is a personality dimension which reflects the perceptual attitudes with which an individual approaches his experiences. It seems to be related to the manner in which a young person approaches and resolves his identity crisis.

Studies on identity development have largely been limited to the college student population and particularly to males. One set of studies has demonstrated that the ego identity-identity diffusion polarity is essentially a stage specific indicator of psychological health, developmental maturity, and personal effectiveness. A promising instrument designed to measure this polarity is the Simmons Identity Achievement Status Scale.

The various investigations using Marcia's identity statuses have shown that the four statuses have distinct characteristics which seem to reflect the manner in which young persons approach and resolve their identity crises. Identity Achievement and Moratorium statuses are two ways of actively dealing with the identity crisis, and

Foreclosure and Identity Diffusion are two ways of not dealing with the crisis. The variable of commitment differentiates the two successful and two unsuccessful approaches and seems to be related to the complexity-simplicity dimension.

A third set of studies has looked at the relationship between degree of identity resolution and resolution of prior psychosocial crises. The findings have generally been that high ego identity is related to successful resolutions and low ego identity to unsuccessful resolutions of the Trust-Mistrust, Autonomy-Shame and Doubt, Initiative-Guilt, and Industry-Inferiority crises, and also of the contemporaneous Intimacy-Isolation crisis. When there were exceptions or insignificant results, it has not been clear as to what extent this has been a function of the measuring instrument and to what extent a function of an absence of relationship. Constantinople's Inventory of Psychosocial Development, though still to be established as a valid instrument, is readily administered and easily scored and makes theoretical sense.

This study will investigate the relationship of complexity-simplicity to these three identity measures, with the extent of exploring the predictive power of this dimension for variations in identity development.

CHAPTER III

HYPOTHESES

The first hypothesis predicts the independence of complexity-simplicity and ego identity. It is expected that high and low ego identity are represented on both ends of the complexity-simplicity dimension.

Hypothesis I:

There is no systematic relationship between complexity-simplicity and ego identity.

The next two hypotheses will examine the relationship of complexity-simplicity at high and low levels of ego identity to identity status. These hypotheses predict that simplicity is related to the two commitment groups and complexity to the two no-commitment groups.

Hypothesis II:

Simplicity is related to a tendency to be committed to an occupation and an ideology.

Hypothesis IIa:

"Simple" persons with high ego identity will tend to be identity achievers.

Hypothesis IIb:

"Simple" persons with low ego identity will tend to be foreclosed in their identity.

Hypothesis III:

Complexity is related to a tendency to remain uncommitted to an occupation and ideology.

Hypothesis IIIa:

"Complex" persons with high ego identity will tend to be in moratoria.

Hypothesis IIIb:

"Complex" persons with low ego identity will tend to be in identity diffusion.

The last six hypotheses will examine the relationship of complexity-simplicity to resolutions of each of the first six psychosocial crises. Here we will attempt to test Barron's hypothesis that complexity is a function of a problem with the earliest stage of development, or the Trust-Mistrust psychosocial crisis. No systematic relationships between complexity-simplicity and the remaining psychosocial crisis resolutions are expected.

Hypothesis IV:

Complexity is negatively related to resolution of the Trust-Mistrust psychosocial crisis.

Hypothesis V:

There is no systematic relationship between complexity-simplicity and level of resolution of the Autonomy-Shame and Doubt psychosocial crisis.

Hypothesis VI:

There is no systematic relationship between complexity-simplicity and level of resolution of the Initiative-Guilt psychosocial crisis.

Hypothesis VII:

There is no systematic relationship between complexity-simplicity and level of resolution of the Industry-Inferiority psychosocial crisis.

Hypothesis VIII:

There is no systematic relationship between complexity-simplicity and level of resolution of the Identity-Identity Diffusion psychosocial crisis.

Hypothesis IX:

There is no systematic relationship between complexity-simplicity and level of resolution of the Intimacy-Isolation psychosocial crisis.

Operational Definitions

Complexity-simplicity will be measured using the Barron Complexity Scale (BCS). High BCS (Hi-BCS) scores fall in the direction of complexity. Low BCS (Lo-BCS) scores fall in the direction of simplicity.

Ego identity will be measured by the Simmons Identity Achievement Status Scale (IAS). High ego identity (Hi-IAS) will be scores falling above the median, and Low ego identity (Lo-IAS) will be scores falling below the median.

Identity status will be determined by using Marcia's structured interview and scoring procedure.

The two commitment statuses are: Identity Achievement and Foreclosure. The two no-commitment statuses are Moratorium and Identity Diffusion.

Basic Trust, Autonomy, Initiative, Industry, Identity, and Intimacy are measured by the difference scores between the two subscales for each psychosocial stage in Constantinople's Inventory of Psychosocial Development (IPD).

General Design

Hypothesis I will be tested by correlating the BCS and IAS scores for a sample of approximately 200 college male juniors and seniors.

These subjects will be ranked on the BCS score, and 30 high scorers will be selected to constitute the "complex" group and 30 low scorers to constitute the "simple" group. The groups will be formed so as to include in each, 15 above-the-median IAS scorers, and 15 below-the-median IAS scorers. The 60 subjects thus obtained will be interviewed, using Marcia's structured identity status interview. These interviews will be taped and the tapes scored into identity statuses by two judges. Hypotheses II through IIb will be tested using Kendall's Tau_b , a statistic more appropriate for this study than the χ^2 test because it is an exact test that takes directionality into account and is independent of N (Kendall, 1970, pp. 43-45, 56-57; Siegel, S., 1956,

pp. 213-223). Table 6 presents a 4 x 4 contingency table of the two independent and two dependent variables and identifies the cells critical for testing the four sub-hypotheses.

The sizable correlations found by Constantinople between the IPD and social desirability necessitates our partialing out this confounding variable to test Hypotheses IV through IX more accurately. The Marlowe-Crowne Social Desirability Scale (SDS) will be administered along with the IPD to the 60 Ss at the time that they are interviewed. Partial correlations will be computed between BCS scores and IPD scale scores, with SDS as the supplementary measure, to test each of Hypotheses IV through IX.

Table 6

Independent and Dependent Variables for Hypotheses II-IIIb

Independent Variables:		Complexity: ^a Ego Identity:	Simple Hi Lo		Complex Hi Lo	
Dependent Variables:						
Commitment	Crisis	Identity Status				
Yes	Yes	Identity Achievement	IIa			
	No	Foreclosure	IIb			
No	Yes	Moratorium	IIIa			
	No	Identity Diffusion	IIIb			

Note. Hypothesis numerals show where the larger frequencies are expected.

^aSince scores on the BCS are scaled with complexity at the high end, the associations expected will be in a negative direction.

CHAPTER IV

METHOD

Subjects

Control of Related Subject Variables

College level. In a follow-up study of college students and their changes in identity status, Waterman et al. (1972) found the greatest number of shifts occurring during the freshman year and additional shifts between the freshman and senior years. Heath (1968) found in his longitudinal study of liberal arts college males that the greatest changes occurred during the freshman year, followed by stabilization and integration over the remaining years. So as to tap the more enduring differences in identity resolution, the sample was limited to juniors and seniors who would be at or nearing the end of the identity formation process.

Age. For the same reason given above, the age range of the subjects was limited to between 21 and 26. This gave us a group of individuals who are in a transitional stage between late adolescence and young adulthood.

College major. Since our focus is on the structural rather than the content characteristics of identity formation, curricular differences are not critical. The results of the studies cited have been comparable, even when the samples were obtained from widely differing curricula. In our sampling procedure, we attempted to include clusters from different colleges and curricula but did not adhere to rigid requirements for representative sampling.

Sex. Sex differences in identity formation have been documented. The empirical base for our study came from studies mostly limited to male subjects and restricted us to the same.

Intelligence. On the identity studies that have reported on intelligence, two have found no relation with ego identity (Bell, 1969; Simmons, 1970). Two have found no relation with identity status (Marcia, 1964; Cross, 1970). Conklin, et al. (1967) found a positive correlation between complexity and intelligence: the BCS showed a correlation coefficient of .21 ($p < .05$) with scores on the Henmon-Nelson Test of Mental Ability. Because intelligence is unrelated to ego identity and identity status, its relationship with complexity-simplicity will not affect the levels of the dependent variables in Hypotheses I through IIIb and VIII. There are no data on the relationship of intelligence to

resolutions on the five other crises, but the probability of a correlation sizable enough to be a serious confounding variable is negligible.

Socioeconomic and ethnic backgrounds. Most of the studies in our review were conducted using white, middle class subjects. There has been no discussion by any of these authors on the effects of socioeconomic or ethnic differences on identity development, but sociological knowledge would lead us to expect that these variables would have a major confounding effect on our results. In considering ways to equalize the socioeconomic effects on our groups, it was reasoned that father's work class would affect the values and attitudes which influence identity development more than would income level. Father's occupation for our subjects was divided into two groups according to the U.S. Department of Labor classifications (Wolfbein, 1968): Group 1 included professional and technical, managerial, clerical and sales, and farmer occupations. Group 2 consisted of the industrial blue collar workers in the skilled, semiskilled and unskilled levels, not including supervisory positions, and also the lower level service occupations (e.g., custodial work). Because it was difficult to equalize for occupational level on all four of our BCS/IAS groups, controls were exerted only for the extreme groups of our major variable: both "complex" and "simple" groups consisted of 22 upper level

and 8 lower level occupational groups. On ethnic membership, only one of the Ss meeting the criteria for selection was a nonwhite; he was dropped from the interview sample.

Subjects

The basic pool of subjects was obtained by testing volunteer male juniors and seniors who were enrolled in ten upper-class courses from a variety of curricula at Michigan State University. Of the 245 students who were tested, 22 were dropped from the sample because of age, 3 were dropped because they were foreign students, and 17 because they did not complete the inventories. This left a N of 203 from which to test Hypothesis I.

From this group, 60 subjects were selected to be interviewed and further tested in the following manner. The extreme scores on the Barron Complexity Scale were combined with above- and below-the-median scores on the Simmons Identity Achievement Status Scale in such a way that there resulted four groups of 15 Ss in the following combinations: Complex/High Ego Identity; Complex/Low Ego Identity; Simple/High Ego Identity; Simple/Low Ego Identity.

Table 7 shows the complexity and ego identity scores for the original sample of 203 Ss and for the derived sample of 60 Ss. Mean differences and t's were computed for the two subgroups at each extreme of both measures and between the extreme groups for both measures.

Table 7

Complexity and Ego Identity Scores for Subject Groups

Subject Groups	N	Complexity Scale (BCS) Scores				
		Range	Mean	S.D.	Mean Diff.	t
Original sample	203	10-39	24.43	5.38		
BCS/IAS Groups						
Complex/Hi Ego Identity	15	28-39	31.80	2.83	1.07 12.70 -0.33	1.11 13.17*
Complex/Lo Ego Identity	15	28-37	30.73	2.40		
Simple/Hi Ego Identity	15	14-21	18.40	2.17		
Simple/Lo Ego Identity	15	10-21	18.73	2.84		
Ego Identity Scale (IAS) Scores						
Subject Groups	N	Range	Mean	S.D.	Mean Diff.	t
Original sample	203	5-22	14.49	2.89		
BCS/IAS Groups						
Complex/Hi Ego Identity	15	15-20	17.27	1.53	0.14 5.43 -0.73	0.25 13.58*
Simple/Hi Ego Identity	15	15-19	17.13	1.36		
Complex/Lo Ego Identity	15	8-13	11.40	1.68		
Simple/Lo Ego Identity	15	10-13	12.13	1.19		

* p < .001

The t's for the subgroup differences are nonsignificant, whereas the t's for the extreme groups for both complexity and ego identity are significant at the .001 level. These indicate that the design requirements were met and that the subgroups can be combined in ways which permit separate analyses of the two independent variables.

Measures

Barron Complexity Scale (BCS)--This is a 50-item true-false scale which was empirically derived from a 975-item MMPI-CPI-IPAR pool used by the Institute of Personality Assessment and Research for their studies on creativity. The items were selected when they differentiated between "complex" and "simple" samples formed on the basis of the Barron-Wesh Art Scale, the original instrument through which the complexity-simplicity dimension was identified. An odd-even reliability of .54 and test-retest reliability of .74 were reported. The BCS correlated .67 with scores on the Barron-Welsh Art Scale for a sample of 180 subjects. Statistically significant differences in mean scores in a number of samples between an independently defined creative group and a group not labeled as creative have been cited as evidence for construct validity. Three additional studies using the BCS showed that complexity was related to perceptual and listening skills (Altmann & Conklin, 1972); to personality correlates of creativity (Ohnmacht, 1967);

and that complexity was related to underachievement and simplicity to overachievement, which the authors interpreted as indicative of nonconformity and conformity to societal norms (Conklin, Boersma, & Zingle, 1967).

Identity Achievement Status Scale (IAS)--The IAS Scale is a 24-item objectively scorable scale developed by D. D. Simmons as an alternative to Marcia's Ego Identity Incomplete Sentence Blank. It is designed to measure identity achievement status and is superior to other measures of ego identity (e.g., Dignan's Ego Identity Scale) in the following ways: (1) care was taken in its construction to weed out items that were sex related and were related to social maladjustment and deviancy and to retain only items which enhanced its internal consistency; (2) the stem responses were the actual responses given by Marcia's subjects; and (3) Simmons gives a variety of evidence for its concurrent validity. The IAS is correlated at a significant level to seven indices of healthy functioning on the Shostrom Personal Orientation Inventory (Self-regard, .40; Inner-directedness, .28; Self-actualizing value, .28; Capacity for intimate contact, .22; Acceptance of aggression, .21; Time-competence, .19; and Synergy, .19), and to two scales on the Edwards Personal Preference Schedule (nEndurance, .30; nSuccorance, -.20). Scores on the IAS are unrelated

to scholastic aptitude and to grade point achievement. Test-retest correlation coefficient is .76.

Inventory of Psychosocial Development (IPD)--Constantinople (1969) developed a 60-item instrument on which the subject responds to each item on a 7-point scale. Five items reflect successful resolutions and five items unsuccessful resolutions for each of Erikson's first six psychosocial stages, making for a total of 12 subscales. So as to have a single resolution score for each stage, I used the difference scores, e.g., the Basic Trust score is the summed scale values for the successful minus the unsuccessful resolution items. This procedure was used effectively by Waterman, Buebel, and Waterman (1970). Constantinople reports test-retest reliability coefficients of .45 to .81 on the subscales, with a median r of .70. A factor analysis of the data for males have shown four bipolar factors reflecting Basic Trust vs. Basic Mistrust, Industry vs. Inferiority, Identity vs. Identity Diffusion, and Intimacy vs. Isolation. The Identity factor was clearer among seniors than among freshmen. Partial indications of validity for the inventory come from Constantinople's own study which showed that Identity increased from freshman to senior years for the same subjects; from Waterman et al. (1970) who found successful resolutions on the Identity scale related to successful resolutions on the four prior crisis scales; and from

Munley (1975) who found that adjusted vocational choices and vocational maturity were related to successful resolutions across the scales.

A weakness of this scale is its high correlation with social desirability. Summing across the successful resolution and across unsuccessful resolution scores, correlations of .38 and -.52, respectively, were found for men with scores on the Marlowe-Crowne Social Desirability Scale. For this reason, a measure of social desirability will be included in the test battery.

Marlowe-Crowne Social Desirability Scale (SDS)--

The SDS is a 33-item true-false scale and was developed by its authors as an alternative to the Edwards Social Desirability Scale because of an objection to the pathological content of many of Edwards' items. Their items were carefully chosen to include only those which reflect behaviors that are culturally sanctioned and approved but which are highly improbable in occurrence and are more appropriate for tapping the test-taking behavior of a normal population, such as college students. They report reliability coefficients of .88 for internal consistency and .89 for test-retest reliability.

Measures of Identity Status--The procedure out-

lined by Marcia (1964) was followed to establish the identity status for each subject. A semi-structured interview was conducted with each subject to obtain

information about his career choice and his political and religious beliefs. Following a manual provided by Marcia, each interview was scored on (1) presence or absence of crisis and (2) degree of commitment in the areas of occupational choice and ideology (religion and politics combined). Crisis is defined by Marcia as "a decision period during adolescence when the individual seems to be actively involved in choosing among meaningful alternatives." Commitment is defined as "the degree of personal investment the individual expresses in a course of action or belief" (p. 25). An identity status was assigned for both occupation and for ideology and a combined status designation given to each subject. The identity statuses are: Identity Achievement (plus crisis, plus commitment); Moratorium (plus crisis, minus commitment); Foreclosure (minus crisis, plus commitment); and Identity Diffusion (minus crisis, minus commitment). Two judges whose agreement reached 70% were used to score the interviews.

Procedure

Administration of BCS and IAS

The investigator explained to each class that she was doing research on how college students go about formulating their occupational goals and personal values. She asked for male junior and senior volunteers to take a 20-minute inventory on personal values during the remaining class period. It was stressed that all information

provided would be kept confidential and that the inventory results would be handled as anonymous data. After all others were excused, an information sheet and test booklet were given to each volunteer. The information sheet explained that approximately a third of the volunteers would be contacted within three weeks and asked to participate further, entailing taking two short inventories similar to the one being completed and a short interview during which the interviewer would ask about the student's vocational plans and life values, all of which would take approximately one hour. The sheet also collected identifying data and information on socioeconomic and ethnic backgrounds. The student was provided an opportunity to indicate whether he would like the results of the inventory mailed to him. All subjects who so indicated were later mailed an explanation of the research and their results on the scales (see Appendix).

Selection of Subjects for Interviews and Interview Procedure

After the BCS and IAS were scored for all the subjects, the BCS scores were ranked, identified only by test booklet number. The IAS scores were designated "high" for those above the median and "low" for those falling below the median. Each score was identified by test booklet number only and was listed together with code designations for socioeconomic level and ethnic background. The top

20 scores on the BCS were selected and the next 20 added with consideration of the IAS scores so as to have equal representations of high and low IAS ego identity levels for the "complex" group. Scores on the simplicity end were selected in the same manner so as to have 20 high IAS and 20 low IAS scores. The extra 5 in each group were added to allow for drop-outs. As it worked out, when applying the cut-off scores, there resulted a pool of 84 subjects. The "complex" and "simple" groups were then compared on socioeconomic and ethnic composition and equalized where necessary. The test booklet numbers of the 84 subjects thus obtained were shuffled so that E would not identify any name with group classification when rematching the test booklet numbers with names of subjects. These subjects were contacted by phone or by mail and scheduled for interviews. Seven persons declined because of time unavailability, and 2 refused to participate; these 9 were roughly equally divided between complex and simple groups. This left a pool of 75 Ss, all of whom were interviewed. The investigator who did the interviewing had no knowledge of the BCS and IAS scores of these subjects.

At the time of the interview, the subjects were first administered the IPD and SDS then interviewed using Marcia's procedure. They were informed that the interview would be taped but that the tapes would be processed

anonymously and that all information given would be kept confidential. None of the interview subjects objected to being taped.

Scoring the Interviews

Two judges, one the investigator and the other a Ph.D. clinical psychologist, each scored all 75 of the taped interviews, following Marcia's scoring manual. The 60 Ss needed for our study were selected and identified after the scoring was completed. This assured that the investigator would score the tapes without knowledge of the group classification of any of the subjects. The training procedure consisted of studying the scoring instructions given by Marcia in his manual and of practice scoring six tapes of interviews obtained by the experimenter for this purpose. It took three training sessions for the two judges to reach a minimum of 67% agreement on each of the identity status areas. The tapes were scored as follows: each subject (identified only by subject number) was assigned the identity status given by both judges if they agreed. On this first scoring, the judges reached the following level of agreement on each of the identity status areas: Occupation, 79%; Ideology, 81%; and Overall Identity Status, 79%. The tapes of the subjects who were assigned different statuses by the two judges were rescored by each judge. On the second scoring, agreement was reached on all but three

subjects. These last three tapes were discussed, the points of disagreement identified, and an agreed-upon identity status assigned.

CHAPTER V

RESULTS

Complexity-Simplicity and Ego Identity

Hypothesis I predicted that scores on complexity-simplicity and ego identity would be independent for subjects in a random sample. Table 8 shows a bivariate distribution of the BCS and IAS scores for the 203 subjects. As can be seen, no relationship exists between the two sets of scores, and a product moment correlation coefficient of .004 amply substantiates the prediction.

Complexity-Simplicity and Identity Status

Hypothesis II predicted that those subjects who fall on the simplicity end of the Barron Complexity Scale would tend to be committed to their occupational choices and ideological beliefs; Hypothesis III predicted that those scoring on the complexity end would tend not to be committed. Table 9 lists the frequencies in this bivariate comparison. Kendall's τ_b of $-.21$ shows an association between complexity and commitment in the predicted negative direction which reaches significance

at the .01 level, giving support to both these hypotheses. When τ_b 's were computed separately for the 30 High Ego Identity Ss and 30 Low Ego Identity Ss, coefficients of -.20 and -.22 resulted, indicating that levels of ego identity did not improve the association between complexity and commitment.

Table 9

Kendall's Rank Order Correlation between Complexity
and Commitment (df = 58)

	Complex	Simple	τ_b	p
Committed	8	14	-.21 ^a	.01
Not Committed	22	16		

^aKendall's tau generally results in a smaller numerical value than the Spearman rank order correlation coefficient but has the same power efficiency (Siegel, 1956, p. 22).

Table 10 shows the frequencies in each identity status for each Complexity/Ego Identity group. The cells in which the greatest column frequencies were predicted in Hypotheses IIa, IIb, IIIa, and IIIb are underlined, followed with the numeral for the hypotheses in parentheses. It is apparent that Hypotheses IIa, IIb, and IIIb were not supported by the data; the frequencies in these critical cells are smaller than the frequencies in the other column cells. Specifically, it was found that

simplicity combined with high ego identity was not associated with identity achievement, simplicity combined with low ego identity was not linked with foreclosure, and complexity at low levels of ego identity was not related to identity diffusion. Although 60% of the complex, high ego identity subjects were in moratorium, this figure does not reach statistical significance, and therefore Hypothesis IIIb is unconfirmed. These results show that the predicted interactions between the two independent variables did not occur. The interactions that did occur will be reported in the section on Non-Predicted Findings.

Table 10

Identity Statuses of "Complex" and "Simple" Subjects
at High and Low Levels of Ego Identity

Identity Statuses	n	"Simple"		"Complex"	
		High Ego Identity	Low Ego Identity	High Ego Identity	Low Ego Identity
Identity Achievement	10	<u>2</u> (IIa)	2	5	1
Foreclosure	12	6	<u>4</u> (IIb)	0	2
Moratorium	30	7	6	<u>9</u> (IIIa)	8
Identity Diffusion	8	0	3	1	<u>4</u> (IIIb)
TOTALS	60	15	15	15	15

Complexity-Simplicity and Resolutions
of Psychosocial Crises

On the first column of Table 11 is listed the partial correlation coefficients between complexity scale scores and scores on the IPD subscales, with social desirability partialled out. The null was predicted for all relationships except the first: Hypothesis IV predicted a negative correlation between complexity and Basic Trust. The predicted relationship was not found and Hypothesis IV is unsupported. Correlations between complexity and Autonomy, Initiative, and Industry were non-significant as predicted in Hypotheses V, VI, and VII. Contrary to prediction, there were significant negative relationships (at .05 level) between complexity and Identity, and complexity and Intimacy. Here we find that complexity appears to be related to nonresolution of the identity and intimacy psychosocial crises but is unrelated to resolutions of the earlier stage crises.

Non-Predicted Findings

Complexity-Simplicity and Crisis

Kendall's τ_b was computed between complexity and crisis and resulted in a coefficient of .21 ($p < .01$) which is the same magnitude of association as between complexity and commitment, but in a positive direction; i.e., complexity is related to an absence of commitment and also to presence of crisis. But whereas levels of ego

identity did not alter the relationship between complexity and commitment, they significantly affected the relationship between complexity and crisis. Table 12 (page 71) gives the 2 x 2 tables between complexity and crisis separately for the High Ego Identity and Low Ego Identity groups. The resulting tau's are .39 and .07, respectively. What this shows is that at high levels of ego identity, there is a further tendency for complex subjects to be going or have gone through a period of crisis in arriving at their identities, whereas at low levels of ego identity, complexity and crisis are not related.

Table 11

Partial Correlations between Independent Variables
and Resolution Scores on Inventory of Psycho-
social Development with Social Desirability
Partialled Out (df = 58)

IPD Subscales	Complexity	Ego Identity
Basic Trust	-.07	.34**
Autonomy	.12	.26*
Initiative	.06	.42**
Industry	-.05	.39**
Identity	-.31*	.29*
Intimacy	-.27*	.32*
Total Resolution Score	-.12	.49**

* p < .05

** p < .01

Table 12

Kendall's Rank Order Correlations between Complexity
at High and Low Levels of Ego Identity and Crisis

	High Ego Identity		Low Ego Identity	
	Complex	Simple	Complex	Simple
Crisis	14	9	9	8
No Crisis	1	6	6	7
Tau _b =	.39		.07	
p <	.001		n.s.	

Complexity-Simplicity and Identity
Status--Further Analysis

Since it was found that complexity was related to commitment, but not to the identity statuses in the ways predicted in Hypotheses IIa, IIb, IIIa, and IIIb, 2 x 4 tables were set up (Table 13), collapsing the ego identity columns, so that complexity-simplicity could be examined singly in relation to the identity statuses. The χ^2 with 3 degrees of freedom reached the .05 level of significance for the areas of occupation and ideology but only to the .10 level on overall identity status. Upon closer examination of the table, it can be seen that the direction of frequencies were the same for Identity Achievement, Moratorium and Identity Diffusion but was reversed for Foreclosure. 2 x 2 χ^2 's were computed for Foreclosure in comparison with all other identity statuses

combined and resulted in the following values: Overall identity status: -6.47 , $p < .01$; Occupation: -7.12 , $p < .01$; Ideology: -5.88 , $p < .01$. All other comparisons resulted in insignificant χ^2 's. The important finding here is that simplicity is related to Foreclosure (as predicted) but not to Identity Achievement.

Table 13

Comparison of Complex and Simple Groups on Identity Status

Identity Status	<u>Identity Status Area</u>					
	Overall		Occupation		Ideology	
	Complex	Simple	Complex	Simple	Complex	Simple
Identity Achievement	6	4	10	6	6	3
Foreclosure	2	10	1	10	1	9
Moratorium	17	13	14	12	17	15
Identity Diffusion	5	3	5	2	6	3
$\chi^2 =$ (df = 3)	6.77		9.80		8.53	
p <	.10		.05		.05	

Ego Identity and Identity Status

In Table 14 complexity-simplicity was collapsed so that Ego Identity could be compared with identity status for each of the three areas. None of the χ^2 's reach statistical significance, nullifying individual comparisons using the χ^2 test for 2×2 tables. However, when Fisher's

Exact Test was applied for the individual comparisons, it was found that Identity Diffusion was associated with low ego identity at a significant level. The exact probabilities for Identity Diffusion in comparison with all other statuses were significant at the .02 level for Overall Identity Status, and .05 level for Occupation, but was nonsignificant for Ideology. All other comparisons resulted in insignificant probabilities. An examination of the frequencies in Table 14 will indicate that high and low ego identity subjects were distributed roughly equally for the Foreclosure and Moratorium statuses and that proportionately greater numbers of high ego identity subjects fell in the Identity Achievement status group.

Table 14

Comparison of High and Low Ego Identity Groups on Identity Status

Identity Status	<u>Identity Status Area</u>					
	Overall		Occupation		Ideology	
	<u>Ego Identity</u>					
	High	Low	High	Low	High	Low
Identity Achievement	7	3	10	6	6	3
Foreclosure	6	6	5	6	5	5
Moratorium	16	14	14	12	16	16
Identity Diffusion	1	7	1	6	3	6
$\chi^2 =$	6.24		4.84		3.32	
(df = 3)						
p <	n.s.		n.s.		n.s.	

Ego Identity and Resolutions of
Psychosocial Crises

Partial correlations between ego identity as measured by the IAS and resolution scores on the IPD are reported on the second column of Table 11. As would be expected, there is a significant relationship between all the resolution scores and ego identity, with the largest correlation found between the total IPD score and ego identity. These results show that the IPD and IAS are related, though not equivalent measures of ego identity. The Identity subscale of the IPD, however, is correlated only .29 with ego identity and appears to be measuring something else.

CHAPTER VI

DISCUSSION

The results of this study do seem to indicate that complexity-simplicity is a significant variable in the identity forming process. As predicted, complexity was found to be associated with the tendency to remain uncommitted in one's occupation and ideology. The two no-commitment identity statuses, Moratorium and Identity Diffusion, were found more frequently among "complex" subjects than among "simple" subjects. The prediction that simplicity was associated with the tendency to be invested in a future role in reciprocation with society was only partially confirmed. There was a significant tendency for "simple" subjects to be committed to an occupation or ideology without going through a crisis period, i.e., Foreclosure subjects tended to come from the simplicity end of the dimension. However, contrary to prediction, those committed after going through a decision period, the Identity Achievers, tended to come from the complexity end of the dimension.

Ego identity was found to interact with complexity but not with simplicity. Complexity at high levels of ego identity was significantly associated with crisis or a decision-making period. Both Identity Achievers and Moratorium subjects tended to be "complex" persons with high ego identity. Low ego identity was significantly associated with Identity Diffusion, but did not interact with complexity at a statistically significant level. The prediction that Foreclosures would come primarily from the low ego identity group was not confirmed. In this group of junior and senior males, Foreclosures were as likely to be found among high as among low ego identity persons.

The patterns of combinations of the two independent variables that were predicted for each identity status are graphed in Figure 1. Figure 2 shows the percentage of each status group that scored high on complexity and high on ego identity. When the predicted and obtained patterns are compared, it can be seen that the Moratorium and Identity Diffusion groups turned out as expected. But what was predicted for the Identity Achievement group was found to describe the Foreclosure group. The Identity Achievement group has a pattern that is similar to that of the Moratorium group but shows a higher proportion of high ego identity subjects. The unexpected findings then are that the Foreclosure group

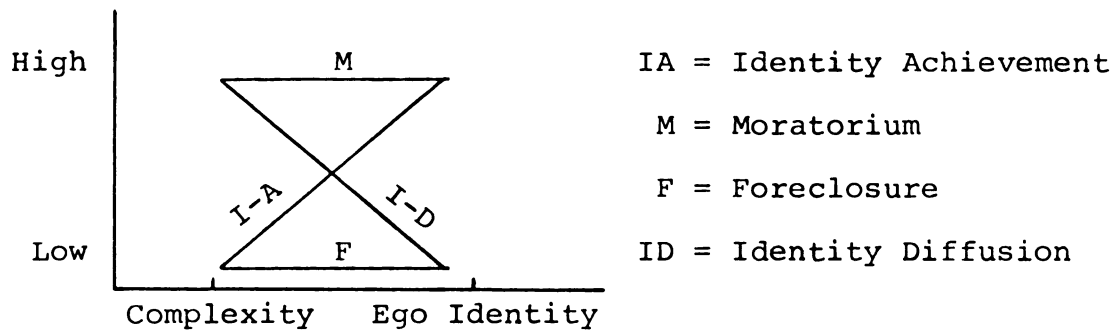


Figure 1. Theoretical expectations of Complexity and Ego Identity levels for Identity Status Groups.

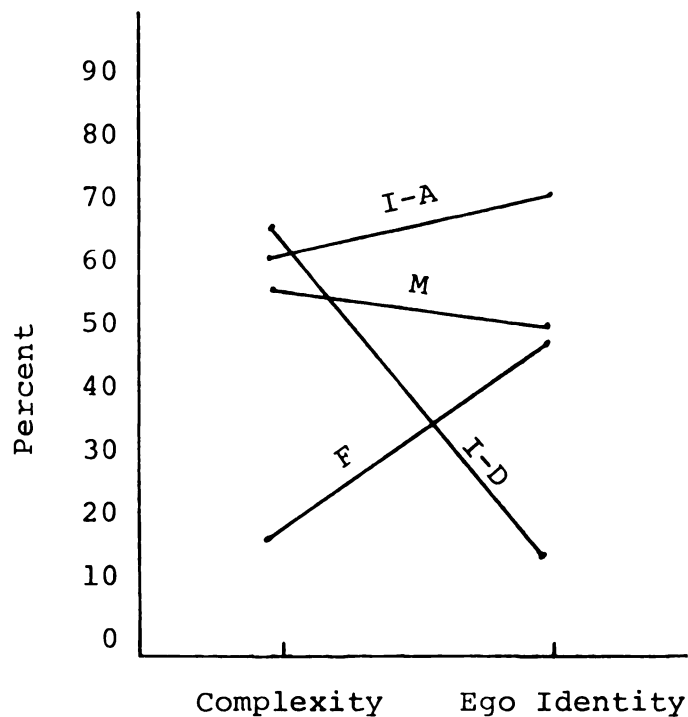


Figure 2. Percentage of Identity Status Groups scoring high on Complexity and Ego Identity Scales.

was not made up primarily of low ego identity subjects and that the Identity Achievers were found to be more "complex" than "simple."

The first of the unexpected findings, that Foreclosures showed up better on ego identity than expected, is partly a function of social desirability: Foreclosures tend to score higher on measures of this variable (Orlofsky, et al., 1973) and this would inflate their scores on the IAS Scale, which is correlated with the Marlowe-Crowne Social Desirability Scale ($r = .320, p < .01$). The most probable explanation for this finding is that this sample of junior and senior males from a large and highly competitive university represents a population of relatively effective individuals, and it might be expected that there was an attrition of the ineffective foreclosures. Waterman and Waterman's (1972) finding that Foreclosures who withdrew from college had left in poor standing, and Block's (1961) failure to find maladjusted "role rigid" individuals in his upperclass sample, both support this explanation.

The fact that most of the Identity Achievers came from the group that scored high on complexity not only raises questions of methodological "error" but of theoretical error as well. One methodological reason for this outcome may be the difficulty of applying the commitment criterion to certain individuals. Both judges

noted that along with those that clearly met both criteria for identity achievement, there were a few marginal individuals who might have fit in the Moratorium classification because these were persons who had not integrated an occupational role into their identity but who had made commitments because of practical necessity. Parenthetically, these individuals fit the picture of the process of occupational choice presented by Ginzberg and his associates (1951) in that their "commitment" or decision is a compromise between what they perceive of themselves and of how they view external reality. Although they consider themselves to be open to change, they may find, as Ginzberg posits, that their chosen path is irreversible. But in the strict Eriksonian sense, these individuals did not seem to have achieved a psychic integration of a way to be in relation to the world--their decisions were very much at a conscious level. Another methodological consideration is the possibility that Identity Achievers come not from the simplicity extreme of this dimension, but from the mid ranges, and that the extreme groups design employed for this study masked this relationship. A more serious consideration is whether the Barron Complexity Scale, a verbal equivalent of the Barron-Welsh Art Scale, measures the same critical characteristics which were the basis of the theory and predictions of this study. The reported correlation of .67 accounts

for only 45% of the variance, allowing for factors other than those identified by Barron to be measured as "complexity," and perhaps not including the factors critical for the differentiation of the Identity Achievers from the Moratorium subjects. One of these would be the conformity-nonconformity dimension. The judges observed that a differentiating characteristic between the Identity Achievers and the Moratorium subjects was that the former were realistic and pragmatic in their approaches to the world; they were basically accepting of the world as it was and saw themselves as integral parts of it. But the post-crisis subjects in the Moratorium group who had not moved on to make occupational or ideological commitments were those that did not accept the world as it was, chose not to fit into traditional roles, but seemed to be carving out their own life styles which they saw as changing over time and experience. (This subgroup of the Moratorium status will henceforth be referred to as "Moratorium types.") A likely explanation, then, of the similarity between Identity Achievers and Moratorium types on the two independent variables would be that the Barron Complexity Scale does not have discriminatory power at the upper end of the scale, probably due to the absence of items which would differentiate "complex" and "simple" persons at high effective levels.

Before considering the question of theoretical error in the outcome we observed for Identity Achievers, some clarification is needed concerning whether the identity status groups represent stages in the identity development process, or whether they constitute types of individuals. Marcia had first conceived of the identity statuses as four points on a single continuum between successful resolution or identity achievement, and unsuccessful resolution or identity diffusion, of the developmental task of this period. But he found that the four statuses were discontinuous on a number of variables. He concluded by viewing them as four "styles of coping with the psycho-social task of forming an ego identity" (1968, p. 558). It should be noted, however, that both the Foreclosures and Identity Diffuse are really not coping with the task of forming an ego identity. The Foreclosures have crystallized a pre-identity period integration and have cut off their identity development process by prematurely fitting into a niche. They can function in the world because of an introjected structure that serves them. The Identity Diffuse either never had an introjected structure or gave one up that did not serve them and have nothing external to hang on to. They are generally maladjusted individuals who are still having to deal with unresolved conflicts from earlier developmental periods. The world,

in terms of an occupational setting or a place where one can interact out of one's beliefs and values, has no meaning for them. But there are those in both the Foreclosure and Identity Diffusion categories who, either because of greater ego strength or a change in external environment, or some other reason, shift out of their status and move on to deal with the developmental tasks of the identity forming period. However, the greater number in these two status groups tend not to change, even after four years in college (Waterman, Geary, & Waterman, 1974).

If, as Marcia intended, Identity Achievement represents that state where one has completed the identity forming task, there remains only the Moratorium status where persons in process can be classed. However, the Watermans' (1972) found that even the Identity Achievement status was not stable over the college years, i.e., that persons shifted out of this category, especially during the freshman year. In this study, the Identity Achievement group was found to include at least three different types of persons. There were those who were similar to the Foreclosures in their attitudes and approach to life, except that they met Marcia's criterion for having gone through a decision period. Generally this meant that they had moved away from their introjected values and roles but did not stray far and came back to them. There were Identity Achievers who were more similar to those in

moratoria because they were still open in their approaches to their futures but had made career decisions with the conscious awareness that this was something they had to do. Then there were the classic Achievers who had been independent since very young, had participated in the world in responsible and effective ways, went through their adolescent crises while in junior high and high school, and were right on the developmental time schedule in the Eriksonian sense. These were individuals who generally had parents that did not overcontrol, yet gave them support when needed. They are persons of their own minds and will probably be those that move on to responsible positions in society and be steady contributors throughout their lives.

Any intensive study of the identity forming process will need to follow carefully the persons who are in moratoria. In our sample of junior and senior males, the largest number of subjects--half of the sample--fell in the Moratorium group. This was a heterogeneous group, ranging from the very diffuse who were struggling to find themselves and the former Foreclosures who got their eyes opened in college to other ways of being, to those who were on their way to identity achievement but had not made their final commitments. There was also a small number in this group, the Moratorium types described

earlier, who had gone beyond the crisis period but were not moving on to cogwheel with society.

This closer scrutiny of the identity statuses leads us to realize that the two criteria, commitment and crisis, arbitrarily slices a group into four parts which then contain different types within each. Commitment and crisis are, after all, both process variables, and the four combinations of these two processes, i.e., the identity statuses, do group the individuals who have certain process characteristics in common. Both Identity Achievers and Moratorium individuals might be expected to change and grow, but the Identity Achievers would go the direction of increasing integration with society while the Moratorium types would move in ways independent of the usual social and occupational roles. The Foreclosure status has typically contained individuals who might come closest to a personality type--the usual cluster of characteristics associated with this group revolve around rigidity, authoritarianism, stereotypy, and dependency. We might expect that these manifestations of an unchanging personality would come with a person who has fixed his development at a pre-identity level. The Identity Diffuse share in common their lack of stability, and sometimes disintegration; but as the several investigators have found, this group seems to defy a single set of descriptions--this identity status group has been

characterized by instability across studies! Regarding the statuses as stages, only the Moratorium status can be truly said to be a stage in identity formation for, except for the Moratorium types who probably should be placed in a fifth category, these are persons who are in process and on their way to some kind of resolution of the identity crisis. However, in a change-inducing college environment, there is much movement in and out of each status group; and it was in observing these shifts that the question of "stages" was introduced.

We are now ready to examine the possibility that the outcome concerning the Identity Achievers--that they turned out to be "complex" rather than "simple"--means that our theory was in error. Because so many of the subjects in our study were still in moratorium, a true comparison between the persons who complete this stage and form commitments and those who remain uncommitted could not be done. This means that our theory is essentially untested. It may turn out that had these subjects been rated after more of them had moved beyond the moratorium, differences on the complexity-simplicity dimension would have emerged. The judges had made notes while scoring the tapes of those in the Moratorium group who were pre-identity achievers, i.e., those who seemed headed toward making commitments in the occupational and ideological areas and had also identified and noted the

Moratorium types. Of the 17 in the former group, 4 were "complex" and 13 were "simple." Of the 8 in the latter group, 7 were "complex" and 1 "simple." These would suggest that a study completed after the identity forming period is completed may turn up differences in complexity-simplicity, and perhaps some other dimensions, between these two groups.

The fact remains that in the study as completed, complexity-simplicity, as measured by the Barron Complexity Scale, did not differentiate the Identity Achiever from the Moratorium type. It may be that it is not complexity-simplicity but something else that underlies the commitment variable. Before we would relinquish complexity-simplicity as a potentially discriminating variable, we would need to complete such a study as mentioned above and would also need to check the difference between the two groups on the Barron-Welsh Art Scale. Separate measures of the components of complexity might also be checked: fluidity vs. stability, conformity vs. nonconformity, optimism vs. pessimism, openness to inner experiencing vs. suppression of impulses and feelings.

The Moratorium type, seemingly headed in a direction very different from that of the Identity Achiever, raises the issue of whether Erikson's unidimensional view of identity development is valid and complete. Other investigators, notably Donovan (1970)

and Orlofsky et al. (1973), have also noted that there were a number of individuals in their studies who did not fall in the Achiever category that were functioning at very high levels. These persons tended to value relationships, personal experiencing, and self-growth more than career achievements or recognition by society. They had high ego strength, were interpersonally active, widely experienced, and existential or transcendent in their views of the meaning of life. The unidimensional view would regard these individuals as having a prolonged moratorium. To repeat an earlier quote from Erikson-- "Their cognitive capacities and social interests are such that they want to go the limit of experience before they fit themselves into their culture and fit their culture to themselves . . ." (Evans, 1967, p. 37). Only a longitudinal study extended a number of years after college graduation would give us a definitive answer of whether these persons do eventually fit themselves to their culture.

The last set of dependent variables to which the complexity scale was applied was the Inventory of Psychosocial Development, consisting of six stage resolution scores. Complexity was found to be related not to mistrust but to lower resolution scores for Identity and Intimacy. This fits with a slower maturation hypothesis that complex persons take longer to arrive at their

resolutions. Barron also talked of complexity and slower maturation, and it may be that to relate complexity to Mistrust was a wrong translation of his hypothesis.

There is an interesting parallel between the results obtained here and the reports that have been made on the Berkeley Adolescence Study. This was a study which compared the social development and ego functioning of male early and late puberal maturers. Of interest here is what Jones (1965) found when she followed up the adolescent subjects when they were in their mid-30's. She found the early maturers to describe themselves as able to make good impressions, poised, responsible, achieving in conformity with society's expectations, and relatively free of neurotic symptoms. They were more moralistic, socialized, and conventional and were somewhat rigid in their cognitive processes and attitudes as contrasted to average and late maturers. The late maturers were higher on measures of neuroticism, psychological mindedness, flexibility, and were seen as showing an ability to cope--with humor, with tolerance of ambiguity, with perceptiveness, and with playfulness in the service of the ego. They also showed a certain fearfulness and vulnerability to threat. In the area of identity, the early maturers were rated as having "pre-mature identity formation," and the late maturers,

"delayed identity formation." Early maturers appear to "escape prematurely into adulthood, while the late maturers take more time in which to integrate their impulses and capacities" (p. 907). The late maturers were less likely to have made marital, familial or vocational commitments at age 30. The early maturers sound like the Foreclosures in our study and the late maturers like the Moratorium subjects. The late maturers also show characteristics associated with complexity, giving support to our slower maturation explanation of the results on the IPD.

In sum, we found that the Barron Complexity Scale and the Identity Achievement Status Scale are measures of two personality dimensions, complexity-simplicity and ego identity, which appear to be independent of each other. Complexity in combination with high ego identity was found to separate those who are moving through and beyond the fifth psychosocial stage from those who are developmentally more immature. Simplicity was associated with those who had foreclosed in their identities. Low ego identity generally went together with identity diffusion. Empirically speaking, these findings have implications for the predictive use of these two measures in determining whether and how a late adolescent is dealing with the identity forming task. The Inventory of Psychosocial Development, measuring resolutions of

the first six psychosocial crises according to Erikson's theory, was found to be related to our measure of ego identity in all six subscales as well as in the total score. Complexity was found to be negatively associated with resolutions of the Identity and Intimacy crises and to be unrelated to resolutions of the four prior psychosocial crises. These results were seen to suggest that complexity is related to slower emotional and social maturation.

APPENDIX

APPENDIX

Research on College Junior and Senior Males
Vocational Choice and Values

No. _____

INFORMATION SHEET

Name _____ Year in College _____

Address _____ Phone _____

Curriculum _____

Birthdate _____ Permanent Address _____
(city & state or country)

Ethnic background (optional): __Anglo __Black __Chicano
__Oriental __Other: _____

Father's occupation (please be as specific as possible. If
deceased, write last occupation):

Mother's occupation:

What is your ultimate occupational goal?

How sure are you of this goal? ☐ very sure
 ☐ sure
 ☐ somewhat sure
 ☐ unsure
 ☐ very unsure

Note: Sometime within the next two weeks, I will be contacting
some of you to ask if you will participate in a second phase of
this research, which will involve about an hour of your time.
I'll explain to you then what that will entail.

If you would like me to send you an explanation of your results
on this inventory, check here ☐. This will probably be mailed
to you about the end of this term.

If you have any questions later, or wish to contact me, I can be
reached through the Department of Psychology. Thank you for
your cooperation.

Caroline Kirby

PERSONAL INVENTORY ANSWER SHEET

DO NOT WRITE YOUR NAME ON THIS ANSWER SHEET. Check to see that the No. above is the same as the No. on the INFORMATION SHEET.

PART I

Circle T for Agree or True

Circle F for Disagree or Not True

- | | | |
|---------|---------|---------|
| 1. T F | 23. T F | 42. T F |
| 2. T F | | 43. T F |
| 3. T F | 24. T F | 44. T F |
| 4. T F | 25. T F | 45. T F |
| 5. T F | 26. T F | 46. T F |
| 6. T F | 27. T F | 47. T F |
| 7. T F | 28. T F | 48. T F |
| 8. T F | 29. T F | 49. T F |
| 9. T F | 30. T F | 50. T F |
| 10. T F | | |
| 11. T F | 31. T F | |
| 12. T F | 32. T F | |
| 13. T F | 33. T F | |
| 14. T F | 34. T F | |
| 15. T F | 35. T F | |
| 16. T F | 36. T F | |
| 17. T F | 37. T F | |
| 18. T F | 38. T F | |
| 19. T F | 39. T F | |
| 20. T F | 40. T F | |
| 21. T F | 41. T F | |
| 22. T F | | |

PART II

- | | |
|---------|---------|
| 1. A B | 13. A B |
| 2. A B | 14. A B |
| 3. A B | 15. A B |
| 4. A B | 16. A B |
| 5. A B | 17. A B |
| 6. A B | 18. A B |
| 7. A B | 19. A B |
| 8. A B | 20. A B |
| 9. A B | 21. A B |
| 10. A B | 22. A B |
| 11. A B | 23. A B |
| 12. A B | 24. A B |

PLEASE DO NOT WRITE ON THIS INVENTORY. Place your answers on the accompanying answer sheet.

PERSONAL INVENTORY

PART I (Barron Complexity Scale)

Instructions:

The first section of this inventory consists of statements of opinions or values, or of personal qualities which you may or may not feel describe you. Read each statement, and without deliberating, respond as follows: If you agree with the statement, or if it is true about you, circle T (True). If you disagree, or it is not true about you, circle F (False).

Do not spend too much time on any one item. Your first impressions are usually what describe you best.

1. I believe in a life hereafter.
2. I get mad easily and then get over it soon.
3. I believe there is a God.
4. In religious matters, I believe I would have to be called an agnostic.
5. I frequently undertake more than I can accomplish.
6. The unfinished and the imperfect often have greater appeal for me than the completed and the polished.
7. I could cut my moorings—quit my home, my parents, and my friends—without suffering great regrets.
8. Politically I am probably something of a radical.
9. I think I take primarily an esthetic view of experience.
10. I remember that my first day at school was very painful.
11. I would enjoy the experience of living and working in a foreign country.
12. I don't expect to have more than two children.
13. Many of my friends would probably be considered unconventional by other people.
14. The way things look now I guess I won't amount to much in the world.
15. I enjoy discarding the old and accepting the new.
16. I doubt that anyone will ever be able to predict my every move.
17. Some of my friends think that my ideas are impractical, if not a bit wild.
18. When someone talks against certain groups or nationalities, I always speak up against such talk, even though it makes me unpopular.
19. I enjoy the company of strong-willed people.
20. As a child my home life was not as happy as that of most others.
21. I have always had goals and ambitions that were beyond anything practical or that seemed capable of being realized.
22. I often get the feeling that I am not really part of the group I associate with and that I could separate from it with little discomfort or hardship.

23. People would be happier if sex experiences were taken for granted in both men and women.
24. I guess my friends tend to think of me as a cold and unsentimental sort of person.
25. I don't like modern art.
26. Disobedience to the government is never justified.
27. Perfect balance is the essence of all good composition.
28. It would be better if our professors would give us a clearer idea of what they consider important.
29. Straightforward reasoning appeals to me more than metaphors and the search for analogies.
30. It is a pretty callous person who does not feel love and gratitude toward his parents.
31. Things seem simpler as you learn more about them.
32. Every wage earner should be required to save a certain part of his income each month so that he will be able to support himself and his family in later years.
33. Kindness and generosity are the most important qualities for a wife to have.
34. When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.
35. It is the duty of a citizen to support his country, right or wrong.
36. Barring emergencies, I have a pretty good idea what I'll be doing for the next 10 years.
37. Army life is a good influence on most young men.
38. I prefer team games to games in which one individual competes against another.
39. An invention which takes jobs away from people should be suppressed until new work can be found for them.
40. A person who doesn't vote is not a good citizen.
41. I become quite irritated when I see someone spit on the sidewalk.
42. I often wish people would be more definite about things.
43. It is always a good thing to be frank.
44. When I get bored I like to stir up some excitement.
45. Sometimes I have the same dream over and over.
46. I much prefer symmetry to asymmetry.
47. I would rather be a steady and dependable worker than a brilliant but unstable one.
48. I would be willing to give money myself in order to right a wrong, even though I was not mixed up in it in the first place.
49. It is annoying to listen to a lecturer who cannot seem to make up his mind as to what he really believes.
50. There are times when I act like a coward.

PART II (Identity Achievement Status Scale)

Instructions:

Below you will find a number of incomplete sentences followed by two possible completions. Select the completion which best fits the answer you would give, were you trying to express your true feelings. Mark your answer by circling A or B on the answer sheet.

1. When I let myself go I
 - A. sometimes say things I later regret.
 - B. have a good time and do not worry about others' thoughts and standards.
2. If one commits oneself
 - A. he should follow through.
 - B. he should have made certain beforehand he was correct.
3. For me, success would be
 - A. the achievement of a large amount of competence in my main career.
 - B. a good job with a family and enough money to support them.
4. Sticking to one occupational choice
 - A. does not enchant me, but will probably be necessary.
 - B. is sometimes difficult.
5. It makes me feel good when
 - A. I look back on the progress I have made in life.
 - B. I can be with my friends and know they approve of me.
6. To change my mind about my feelings toward religion
 - A. I would have to know something about religious beliefs.
 - B. would require a terrific amount of convincing by some authority.
7. I'm at my best when
 - A. I'm on my own and have sole responsibility to get a given job done.
 - B. my mind is clear of all worries, even trivial ones.
8. When I let myself go I
 - A. don't change much from my regular self.
 - B. think I talk too much about myself.
9. I am
 - A. not as grateful as I should be.
 - B. not hard to get along with.
10. Getting involved in political activity
 - A. is as futile as necessary.
 - B. doesn't appeal to me.
11. When I consider my goals in the light of my family's goals
 - A. they are basically the same.
 - B. I feel that they are missing a lot.
12. If one commits oneself
 - A. one must know oneself.
 - B. then he's liable to miss a lot of opportunities.

13. For me, success would be
 - A. in what I do, not in how much money I earn.
 - B. to be accepted by others.
14. If I had my choice
 - A. I would live in a warm climate such as Southern California or Hawaii.
 - B. I would do things as I have.
15. It seems I've always
 - A. wanted to go to college.
 - B. held back from reacting to certain things.
16. Sticking to one occupational choice
 - A. does not enchant me, but it will probably be necessary.
 - B. suits me fine.
17. It makes me feel good when
 - A. I can be with my friends and know they approve of me.
 - B. I think of all the good things that can happen in a lifetime.
18. When I let myself go I
 - A. have a good time and do not worry about others' thoughts and standards.
 - B. never know exactly what I will say or do.
19. To change my mind about my feelings toward religion
 - A. is not hard to do, but I keep going back to the religion I started with.
 - B. would require a terrific amount of convincing by some authority.
20. The difference between me as I am and as I'd like to be
 - A. is very likely to be dissolved in time.
 - B. is that I have potential, but lack a certain amount of drive.
21. I know that I can always depend on
 - A. the good will of others, if I treat them right.
 - B. my mind and diligence to surmount my barrier.
22. If one commits oneself
 - A. one must know oneself.
 - B. he should finish the task.
23. For me, success would be
 - A. being a recognized authority in my chosen field.
 - B. to be accepted by others.
24. When I let myself go I
 - A. never know exactly what I will say or do.
 - B. am most apt to do well.

PERSONAL INVENTORY - PART III
(Inventory of Psychosocial Development)

Instructions:

Following these instructions you will find a list of 60 items and phrases which were used by students to describe themselves. Please use the list to describe yourself as you honestly feel and believe you are. Following each phrase are numbers from 7 to 1. Circle the seven 7 for phrases that are definitely most characteristic of you, the 6 for phrases that are very characteristic of you, etc. Circle the 1 if the phrase is definitely most uncharacteristic of you. In other words:

- 7 = definitely most characteristic of you
- 6 = very characteristic of you
- 5 = somewhat characteristic of you
- 4 = neither characteristic nor uncharacteristic of you
- 3 = somewhat uncharacteristic of you
- 2 = very uncharacteristic of you
- 1 = definitely most uncharacteristic of you

Work quickly; your first impressions are generally the best.

1. Placid and untroubled 7 6 5 4 3 2 1
2. An automatic response to all situations 7 6 5 4 3 2 1
3. Adventuresome 7 6 5 4 3 2 1
4. Can't fulfill my ambitions 7 6 5 4 3 2 1
5. Confidence is brimming over 7 6 5 4 3 2 1
6. Little regard for the rest of the world 7 6 5 4 3 2 1
7. Incapable of absorbing frustration
and everything frustrates me 7 6 5 4 3 2 1
8. Value independence above security 7 6 5 4 3 2 1
9. Sexually blunted 7 6 5 4 3 2 1
10. Conscientious and hard working 7 6 5 4 3 2 1
11. A poseur, all facade and pretense 7 6 5 4 3 2 1
12. Candid, not afraid to expose myself 7 6 5 4 3 2 1
13. Accessible to new ideas 7 6 5 4 3 2 1
14. Meticulous and over organized 7 6 5 4 3 2 1
15. Dynamic 7 6 5 4 3 2 1
16. Don't apply myself fully 7 6 5 4 3 2 1
17. Natural and genuine 7 6 5 4 3 2 1
18. Preoccupied with myself 7 6 5 4 3 2 1
19. Can't share anything 7 6 5 4 3 2 1
20. Free and spontaneous 7 6 5 4 3 2 1
21. Afraid of impotence 7 6 5 4 3 2 1
22. Interested in learning and like to study 7 6 5 4 3 2 1
23. Spread myself thin 7 6 5 4 3 2 1
24. Warm and friendly 7 6 5 4 3 2 1

25. Imperturbable optimist 7 6 5 4 3 2 1
26. Cautious, hesitant, doubting 7 6 5 4 3 2 1
27. Ambitious 7 6 5 4 3 2 1
28. Fritter away my time 7 6 5 4 3 2 1
29. Poised 7 6 5 4 3 2 1
30. Very lonely 7 6 5 4 3 2 1
31. Pessimistic, little hope 7 6 5 4 3 2 1
32. Stand on my own two feet 7 6 5 4 3 2 1
33. Think too much about the wrong things 7 6 5 4 3 2 1
34. Serious, have high standards 7 6 5 4 3 2 1
35. Attempt to appear at ease 7 6 5 4 3 2 1
36. Have sympathetic concern for others 7 6 5 4 3 2 1
37. Able to take things as they come 7 6 5 4 3 2 1
38. Feel as if I were being followed 7 6 5 4 3 2 1
39. Inventive, delight in finding
new solutions to new problems 7 6 5 4 3 2 1
40. Ineffective, don't amount to much 7 6 5 4 3 2 1
41. Know who I am and what I want out of life 7 6 5 4 3 2 1
42. Cold and remote 7 6 5 4 3 2 1
43. Dim nostalgia for lost paradise 7 6 5 4 3 2 1
44. Quietly go my own way 7 6 5 4 3 2 1
45. Big smoke but no fire 7 6 5 4 3 2 1
46. Accomplish much, truly productive 7 6 5 4 3 2 1
47. Never know how I feel 7 6 5 4 3 2 1
48. Tactful in personal relations 7 6 5 4 3 2 1
49. Deep, unshakable faith in myself 7 6 5 4 3 2 1
50. Always in the wrong, apologetic 7 6 5 4 3 2 1
51. Sexually aware 7 6 5 4 3 2 1
52. A playboy, always "hacking around" 7 6 5 4 3 2 1
53. Pride in my own character and values 7 6 5 4 3 2 1
54. Secretly oblivious to the opinions of others 7 6 5 4 3 2 1
55. Never get what I really want 7 6 5 4 3 2 1
56. Good judge of when to comply and when to assert myself 7 6 5 4 3 2
57. Inhibited and self restricted 7 6 5 4 3 2 1
58. Excel in my work 7 6 5 4 3 2 1
59. Afraid of commitment 7 6 5 4 3 2 1
60. Comfortable in intimate relationships 7 6 5 4 3 2 1

IPD ITEMS BY STAGES OF DEVELOPMENT

The set of items had been classified as to Psychosocial Stage and as to Outcome, i.e., whether the item represented a successful or unsuccessful resolution of the crisis at that stage. There were 5 items in each of the 12 categories of the design:

I. <u>Basic Trust</u>	<u>Basic Mistrust</u>
1. placid and untroubled. 13. accessible to new ideas. 25. imperturbable optimist. 37. able to take things at they come 49. deep, unshakeable faith in himself.	7. incapable of absorbing frustration and every- thing frustrates him. 19. can't share things with anybody. 31. pessimistic, little hope. 43. dim nostalgia for lost paradise. 55. never gets what he really wants.
II. <u>Autonomy</u>	<u>Shame and Doubt</u>
8. values independence above security. 20. free and spontaneous. 32. stands on his own two feet. 44. quietly goes his own way. 56. good judge of when to assert himself.	2. an automatic response to all situations. 14. meticulous and over organized. 26. cautious, hesitant, doubt- ing. 38. feels as if he were being followed. 50. always in the wrong, apologetic.
III. <u>Initiative</u>	<u>Guilt</u>
3. adventuresome. 15. dynamic 27. ambitious 39. inventive, delights in finding new solutions to new problems. 51. sexually aware.	9. sexually blunted. 21. afraid of impotence. 33. thinks too much about the wrong things. 45. big smoke but no fire. 57. inhibited and self- restricted.
IV. <u>Industry</u>	<u>Inferiority</u>
10. conscientious and hard working 22. interested in learning and likes to study. 34. serious, has high standards. 46. accomplishes much. 58. excels in his work.	4. can't fulfill his ambitions. 16. doesn't apply himself fully. 28. fritters away his time. 40. ineffective, doesn't amount to much. 52. a playboy, always "hacking" around.

IDP Items by Stages of Development, continued.

V. IdentityRole Diffusion

- | | |
|--|---------------------------------------|
| 5. confidence is brimming over. | 11. a poseur, all facade and pretense |
| 17. natural and genuine. | 23. spreads himself thin. |
| 29. poised | 35. attempts to appear at ease. |
| 41. knows who he is and what he wants out of life. | 47. never knows how he feels. |
| 53. pride in his own character and values. | 59. afraid of commitment. |

VI. IntimacyIsolation

- | | |
|--|---|
| 12. candid, not afraid to expose himself. | 6. little regard for the rest of the world. |
| 24. warm and friendly. | 18. preoccupied with himself. |
| 36. has sympathetic concern for others. | 30. very lonely. |
| 48. tactful in personal relations. | 42. cold and remote. |
| 60. comfortable in intimate relationships. | 54. secretly oblivious to the opinions of others. |

PART IV

Instructions. (Marlowe-Crowne Social Desirability Scale)

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally. Circle T (true) or F (false) for each item.

- T F 1. Before voting I thoroughly investigate the qualifications of all the candidates.
- T F 2. I never hesitate to go out of my way to help someone in trouble.
- T F 3. It is sometimes hard for me to go on with my work if I am not encouraged.
- T F 4. I have never intensely disliked anyone.
- T F 5. On occasion I have had doubts about my ability to succeed in life.
- T F 6. I sometimes feel resentful when I don't get my way.
- T F 7. I am always careful about my manner of dress.
- T F 8. My table manners at home are as good as when I eat out in a restaurant.
- T F 9. If I could get into a movie without paying and be sure I was not seen I would probably do it.
- T F 10. On a few occasions, I have given up doing something because I thought too little of my ability.
- T F 11. I like to gossip at times.
- T F 12. There have been times when I felt like rebelling against people in authority even though I knew they were right.
- T F 13. No matter who I'm talking to, I'm always a good listener.
- T F 14. I can remember "playing sick" to get out of something.
- ~~T F~~ 15. There have been occasions when I took advantage of someone.
- T F 16. I'm always willing to admit it when I make a mistake.
- T F 17. I always try to practice what I preach.
- T F 18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.
- T F 19. I sometimes try to get even rather than forgive and forget.
- T F 20. When I don't know something I don't at all mind admitting it.
- T F 21. I am always courteous, even to people who are disagreeable.
- T F 22. At times I have really insisted on having things my own way.

- T F 23. There have been occasions when I felt like smashing things.
- T F 24. I would never think of letting someone else be punished for my wrongdoings.
- T F 25. I never resent being asked to return a favor.
- T F 26. I have never been irked when people expressed ideas very different from my own.
- T F 27. I never make a long trip without checking the safety of my car.
- T F 28. There have been times when I was quite jealous of the good fortune of others.
- T F 29. I have almost never felt the urge to tell someone off.
- T F 30. I am sometimes irritated by people who ask favors of me.
- T F 31. I have never felt that I was punished without cause.
- T F 32. I sometimes think when people have a misfortune they only got what they deserved.
- T F 33. I have never deliberately said something that hurt someone's feelings.

IDENTITY STATUS INTERVIEW

Introduction

What year are you in?

Where are you from?

How did you happen to come to MSU?

Did you father go to school? Where? What does he do now?

Did you mother go to school? Where? What does she do now?

Occupation

You said you were majoring in _____; what do you plan to do with it?

When did you come to decide on _____? Ever consider anything else? When? What seems attractive about _____?

Most parents have plans for their children, things they'd like them to go into or do--did yours have any plans like that?

How do your folks feel about your plans now?

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

Religion

Do you have any particular religious preference? How about your folks?

Ever active in church? How about now? Get into many religious discussions?

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

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

Politics

Do you have any particular political preference? How about your parents?

Ever take any kind of political action--join groups, write letters, carry signs--anything at all like that?

Any issues you feel pretty strongly about?

Any particular time when you decided on your political beliefs?

Whom would you like to see President?

Do you have any questions to ask me?

Subject # _____.

IDENTITY STATUS - INTERVIEW RATING SHEET
(Sample)Occupation: ForeclosureReligion: Foreclosure - DiffusionPolitics: Identity Achievement - ForeclosureIdeology: ForeclosureIDENTITY STATUS: ForeclosureADAPTABILITY TO ENVIRONMENTAL PRESS: Medium

COMMENTS:

Use this space for note-taking and demurrers.

Dear

105

May 28, 1976

Earlier this term, you took a personal inventory which I administered to the male juniors and seniors in your class. At that time you indicated on the information sheet that you would like me to send you an explanation of your results.

The study for which you completed the inventory is my dissertation for a Ph.D. in Counseling Psychology. In it, I am trying to check out some ideas I have developed over several years as a college counselor, about the different approaches young people take toward their future, both careerwise as well as in their values and life styles. The inventory you took formed part of this study, and was designed to measure in a general way a personality dimension which I believe determines partly how and which way a person directs himself in relation to the future. This dimension is called Preference for Complexity vs. Preference for Simplicity. To explain it, I will give you a rough description of the hypothetical person who falls on either extreme of this dimension.

The person who has a preference for complexity is attracted to diversity and tends to look at the exceptions rather than the rule. He likes to have things open-ended and sometimes resists making decisions because he doesn't want to close out on the alternatives he has not yet explored. He takes longer to "get it together" because he is trying to include things that don't fit easily. He is often dissatisfied with old solutions, and tends to be a nonconformist. He wants to find his own unique way to do things rather than to try the established ways offered by society.

The person who has a preference for simplicity is attracted to stability and order. He is more content with things as they are and can more readily find and accept a place for himself in the social system. Because he has a tendency to want things to run smoothly, he may sometimes close out on certain alternatives which seem to be obstacles to his smooth progress. Whereas the person with a preference for complexity runs the risk of considering too many alternatives and staying open too long, the person with a preference for simplicity runs the opposite risk of not considering enough alternatives and making his decision too soon. The effective person with either tendency is able to find the right point at which to pull himself together and to begin focusing on a direction of his choosing.

This inventory can only give an indication of which way you lean, and is not designed to measure you precisely. It may even measure you inaccurately. Most persons score somewhere in the middle, and very few score at the extremes. On the scale below, I have checked approximately where you fell. The Middle score indicates that your score fell in the mid range and shows neither tendency to be very strong.

High preference for complexity	Tendency to prefer complexity	Middle	Tendency to prefer simplicity	High preference for simplicity
_____	_____	_____	_____	_____

I hope that taking the inventory and learning your score has been of some use to you. Thanks for participating in my study.

Sincerely,

Caroline . Kirby

Dear

June 2, 1976

I am sending you this second letter to explain what I was trying to do in the second phase of my research in which you took part. Basically, I was looking at how you had approached your career decisions and how you formed your basic beliefs, and where you were in your development in these areas.

I may have explained to you some of the ways young people differ in the way they approach their decisions about the future. One difference has to do with how long they stay open to alternatives before making a choice or setting a goal. The inventory on Preference for Complexity/Simplicity is something I am checking in relation to this difference. Another difference has to do with how much unfinished business the person is trying to deal with and complete before focusing his attention ahead into adulthood. By this, I mean something like the following:

In the growth of a person from childhood to adulthood, he or she has to complete certain tasks and gain mastery over a number of things to function as a full fledged adult. These have to do with physical, intellectual, emotional, and social development. Each person differs in how much he is able to master at each stage of his life. Some persons have high mastery in intellectual tasks, some in social and interpersonal relationships, some in their sense of emotional independence, etc. Persons differ also in how satisfied they are with their present level of development. The college years are in a sense the last chance a person has to finish up these developmental tasks while he is still free from full responsibility for himself. Some of you are very aware that you are trying to get in some experiences which you feel you won't be able to get once you're in the work world. Some of you have very consciously decided that you've done all you can and are now ready to take on adult responsibilities.

The second inventory you took tries to measure something of where you are on this matter of unfinished developmental tasks. This inventory is still being researched and I am hesitant to make any kind of definite statement about how you scored and what your score means. But so that you can get a general idea, I have worked out the following scale and have placed a check mark where you seem to fall. Please keep in mind that this score reflects your feeling that you are finished or unfinished, and does not compare you with other persons on where you are in your development.

Sense of having some
unfinished tasks

Sense of having
completed most tasks

If you have any questions about your scores, or about my study, you can contact me by calling 353-9174, or by leaving a message at 355-9561. I want to express my special thanks to you for giving me your time and sharing with me your plans, thoughts, and feelings. I enjoyed each interview and feel enriched from having learned about so many lives.

Sincerely,

Caroline Kirby

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