THE RELATIONSHIP BETWEEN MARCIA'S EGO IDENTITY STATUS PARADIGM AND ERIKSON'S PSYCHOSOCIAL THEORY

by

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ABSTRACT

The Relationship Between Marcia's Ego Identity Status Paradigm and Erikson's Psychosocial Theory

by

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While Erikson's psychosocial theory continues to dominate theoretical explanations of adolescent identity development, Marcia's ego identity status paradigm has become the primary basis to empirically measure such notions. Though Marcia's paradigm has its roots in psychosocial theory, questions have surfaced regarding the communality of Marcia's and Erikson's notions on identity. Issues of scope, connectedness, definition, terminology, and measurement have marked a potential divergence among the two approaches—views which until recently seemed almost unified. This study addressed the relationship between Erikson's psychosocial theory and Marcia's ego identity status paradigm. By administering identity and psychosocial stage-specific measures to a sample of college-age adolescents, an assessment of the empirical relationship between the two theories has been established.
A general pattern was found that the highest levels of psychosocial trust, autonomy, initiative, and industry were reported by the achieved respondents, followed by the foreclosed, moratorium, and diffused respondents, respectively. Discriminant analysis also identified specific psychosocial differences between statuses. The achieved respondents reported higher levels of trust, autonomy, initiative, and industry than moratoriums; significantly higher levels of autonomy and industry than the foreclosed; and significantly higher levels of trust and initiative, and significantly lower levels of guilt when compared to diffused respondents. Moratoriums reported significantly higher levels of emotional autonomy and significantly lower levels of trust and initiative than foreclosed respondents. Moratoriums did report significantly higher initiative and lower guilt than the diffused. Foreclosed respondents reported significantly higher initiative and lower autonomy than diffused persons. These results provide significant—albeit initial—quantitative evidence that Marcia's ego identity status paradigm corresponds both specifically and broadly to Erikson's theory of identity development.
CHAPTER I
INTRODUCTION

Research on psychosocial development increased dramatically during the 1980s. As a basis to explain both normal and psychopathological development, psychosocial theory is growing in scope and utility. Achenbach (1988) suggested that Erikson's theory, in particular, can provide a basis to assess human development and associated problems in adolescents.

The most researched area of Erikson's theory to date has been adolescent identity development—the fifth of Erikson's eight psychosocial stages. Few studies, however, have empirically investigated how the four preceding stages of trust, autonomy, initiative, and industry relate to identity development. Much of that void can be attributed to the dearth of efficacious, reliable, and empirically valid constructs addressing Erikson's theory. The most widely employed psychosocial instrument of the 1970s, 1980s, and early 1990s—James Marcia's (1966) identity status interview—focuses solely on Erikson's fifth stage.

Much empirically based research—over 200 studies (American Psychological Association, 1992)—has stemmed from Marcia's identity status model. Recently, however, Cote and Levine (1988a) have challenged the "assumption that ego identity status is an appropriate
conceptualization and operationalization of Erikson's theory” (p. 147). The objective of this study was to empirically assess the relationship between Marcia's ego identity status paradigm and Erikson's psychosocial theory.

Erikson's Psychosocial Theory

Erikson's (1959, 1963, 1968, 1982) theory has presented an innovative perspective of developmental issues as they function across the life-cycle. His psychosocial perspective seeks to integrate the interactive influences of the psyche with biological predispositions and social experience. Erikson furthered the notion of epigenetic themes— or the idea that "all growth and development follow analogous patterns" (Erikson, 1982, p. 27). Erikson's portrayal of universal life-stages serves to elucidate human development in a comprehensive, yet parsimonious and easily understood way.

Erikson's (1963) eight ages of man address common crises faced by individuals from birth to death. The first five stages (trust, autonomy, initiative, industry, and identity) directly correspond to Freudian early-life phases. With the addition of three adult relevant stages (viz., intimacy, generativity, and integrity) Erikson moved beyond Freud's emphasis upon infancy and childhood, and acknowledged development in adulthood.

Many theoreticians (e.g., Mathes, 1981) have suggested that Erikson's theory affords the greatest promise to empirically study
human development across the lifespan. Vaillant and Leff (1980) have argued that Erikson’s theory is the only formal model to adequately describe adult development.

Marcia’s Ego Identity Status Paradigm

Corresponding with Erikson’s fifth stage of psychosocial development, Marcia developed a means to measure adolescent identity development (Marcia, 1966). In an attempt to explicate the essence, function, and dimension of identity, Marcia modified specific Eriksonian terms to operationalize identity formation. The terms *foreclosure*, *identity diffusion*, *moratorium*, and *identity achievement* became Marcia’s identity statuses. Broadly defined, identity status represents the present state of a person’s identity vis-a-vis past crisis (exploration) and present commitments.

Marcia’s model has the research advantage of addressing highly circumscribed variables. Not only does the model focus on a single stage of psychosocial development, the identity stage, it deals with only two of Erikson’s several notions on ego identity—exploration and commitment. With such regulated scope, the measurement of identity has been simplified. In spite of its simplicity, Marcia’s identity status paradigm has proven robust, if not remarkable, in correlating with numerous adolescent behaviors, attitudes, and tendencies. Many researchers are satisfied that the ego identity status model is an adequate assessment of identity development. However, a few have
argued that Marcia’s paradigm distorts and trivializes Erikson’s notion of identity and that it has severed ties from its psychosocial parent (Cote & Levine, 1988a).

With the development of broader measures of Erikson’s theory, such as the Eriksonian Psychosocial Stage Inventory (Rosenthal, Gurney, & Moore, 1981), researchers have a means to examine Marcia’s model within the context of Erikson’s stage theory. This study addressed the relationship between Marcia’s identity status model and Erikson’s theory by assessing the empirical relationship between several related, concept- and theory-based measures.

Rationale for study

Although Erikson’s theoretical notions are growing in acceptance, popularity, and utility, the comprehensive nature of his theory—addressing the interactive psychological, social, biological, cultural, and historical aspects of human development from birth to death—covers vast areas of uncertainty and variance. Differing interpretations of the functions and interconnectedness of such broad human domains and ages present a considerable limitation to providing empirical validation for a theory of development that spans the life-cycle.

Although the call has long been out to operationalize Eriksonian concepts, the notion of ego identity “seems hopelessly broad and vague” (Bourne, 1978a, p. 228). Erikson, himself, recognized the
difficulty stemming from both broad and narrow use of his terms. In 1968 Erikson wrote that:

Identity and identity crisis have in popular and scientific usage become terms which alternately circumscribe something so large and seemingly self-evident that to demand a definition would almost seem petty, while at other times they designate something made so narrow for purposes of measurement that the overall meaning is lost, and it could just as well be called something else. (p.15)

Growing acceptance aside, Erikson's theory, as Looft (1973) pointed out, has generally been relegated to discussion sections as a sort of after-the-fact framework in which to discuss data already obtained. Bourne (1978b) suggested that the first step to validate Eriksonian theory is to broadly define Eriksonian dimensions and then articulate them in terms of more specific constructs, and that "comparing the nature and degree of convergence observed among the more specific constructs would serve to delineate the broader ones..." (p. 386). In other words, theoretical accuracy is furthered by bridging empirical findings.

If Marcia's operationalization of identity accurately captures the content of Erikson's theory, ego identity development should be related to the development of trust, autonomy, initiative, and industry. Marcia (1989) stated:

If the identity statuses...are, in fact, more or less accurate...then the prediction would be that at late adolescence, when some of the interpersonal and familial dust has settled, those in higher identity statuses should be higher on sophisticated measures of adaptation than those in lower statuses. (p. 403)
Such a comparison has not been made prior to this study, and is of inherent interest and importance to the field (Archer, 1992; Bourne, 1978b; Caillet & Michael, 1983; Cote & Levine, 1989; Owen, 1984). Lastly, by contrasting separate stage measures with the identity status paradigm, multistage psychosocial profiles can be established which are needed to verify psychosocial theory.

Identity status research has shown numerous advantages for persons in achievement and numerous disadvantages for persons in diffusion. If identity statuses are related to Eriksonian age-related stages, then psychosocially based (viz., trust, autonomy, initiative, etc.) interventions could eventually be developed to assist young children, school children, and preadolescents early-on toward identity achievement.

Operational Definitions

Erikson's First Five Stages

In order to understand psychosocial theory and identity status, conceptual definitions, and functions—as they relate to adolescent identity development—are needed. Erikson's first five psychosocial stages are (a) trust versus mistrust, (b) autonomy versus shame and doubt, (c) initiative versus guilt, (d) industry versus inferiority, and (e) identity versus role confusion.

Trust, the first stage, represents the basic task to be resolved during infancy. A sense of trust includes a degree of personal
confidence and hope (budding faith) in oneself, in others, and in one's environment. An extreme sense of trust results in a maladaptive tendency toward sensory maladjustment (over-stimulation). A predominance of mistrust is characterized by a sense of deprivation or abandonment. An extreme sense of mistrust results in a malignant tendency toward withdrawal (extreme avoidance) (Erikson, Erikson, & Kivinick, 1986). Erikson emphasized that a proper sense of trust, trustworthiness, and hope is a pervasive need during identity development (Erikson, 1968). Erikson portrayed such a sense in adolescence as indicative of the statement: "I am what hope I have and give" (p. 114).

**Autonomy**, the second stage of development, can be resolved as early as age 2 or 3. If the adaptive ego strength of hope has been achieved, toddlers will begin to control their experiences (Erikson, 1982). Autonomy literally means self (autos) ruled (nomus), and is purportedly initiated through an increasing desire to assert one's will. Balanced resolution of stage two will produce an increased sense of self-control, cooperation, willpower, and freedom of self-expression. An extreme sense of autonomy results in a maladaptive tendency toward shameless willfulness, whereas, inadequate autonomy is evidenced by a sense of shame, doubt, loss of control, and compulsion. An extreme sense of shame and doubt results in a malignant tendency toward compulsion (Erikson et al., 1986). Erikson (1968) wrote that resolution of the autonomy versus shame and doubt stage is vital to
identity development in that "the question is always whether we remain the masters...by which things become more manageable or whether the rules master the ruler" (p. 112) and that "I am what I can will freely" (p. 114).

**Initiative** becomes salient between the ages of about 4 to 7 when a person is becoming capable of building upon a sense of autonomy and trust. Initiative is construed as the ability to begin and follow through with a task or a plan. Initiative is reflected in purpose-fulness, ambition, and self-will (versus self-control). An extreme excess of initiative results in a maladaptive tendency toward ruthlessness, whereas, the antithetical outcome is guilt and its companions during identity development: anxiety, moralistic prohibition, and overcompensation (Erikson, 1968). An extreme sense of guilt results in a tendency toward malignant inhibition (Erikson et al., 1986). Erikson (1968) wrote that the "indispensable contribution of initiative to identity development...[is] the firmly established, steadily growing conviction...that 'I am what I can imagine I will be’” (p. 122).

**Industry** becomes relevant during the grade school years when children obtain a greater degree of conscience. The school-age child is expected to learn and incorporate basic social skills to bring productive tasks to completion. Resolution of industry results in a sense of personal competence and worth—the opposite of which is disappointment and a stifling sense of inferiority. An extreme excess of industry results in a tendency toward narrow virtuosity. An extreme
lack of industry results in a tendency towards malignant inertia (a pervasive sense of failure) (Erikson et al., 1986). Erikson (1968) wrote that a sense of industry is vital to identity development in that a person believes: "I am what I can learn to make work" (p. 127).

Identity is achieved during adolescence—for purposes of this study defined as persons ages of 18 to 24—but achieved only if the challenges of previous stages have been successfully resolved. According to Erikson (1968) adolescence is "not an affliction, but a normative crisis" (p. 16). Identity is more than the sum of the previous stages—a synthesis and resynthesis encompassing all personal attitudes, aptitudes, identifications, and endowments with opportunities offered in environmental and social roles. Successful identity formation results in increased devotion, faith, and fidelity in the relationship between oneself and others.

Whereas an overabundance of identity results in a maladaptive tendency toward fanaticism (destructive, militant totalism), a lack of identity results in a sense of discontinuity and role confusion (Erikson, 1968). An extreme sense of role confusion results in repudiation (diffidence) (Erikson et al., 1986).

Marcia's Identity Statutes

Marcia partitioned identity development into two dimensions: personal exploration and commitment. Presence and absence of these two criteria yield four identity statuses, defined as (a) achievement: a
balance of commitment following exploration, (b) *moratorium*: a preponderance of exploration over commitment, (c) *foreclosure*: a preponderance of commitment over exploration, and (d) *diffusion*: a lack of exploration and commitment.

*Achievement* represents the most sophisticated level of identity formation. An achieved individual is considered to have resolved a period of crisis and established firm, yet flexible, commitments. Studies have shown achieved individuals to have greater intelligence, greater levels of intimacy, and greater levels of interpersonal and social maturity compared to those in other identity statuses (see Adams, Bennion, & Huh, 1987b; Bourne, 1978a, 1978b).

*Moratorium* is considered the second most adaptive status of identity development. Individuals experiencing moratorium are considered to be in a state of crisis or exploration, and still largely ideologically and occupationally uncommitted. Moratoriums are characterized by higher levels of anxiety, authority conflict, and resistance to authoritarianism (see Adams et al., 1987b; Bourne 1978a, 1978b).

*Foreclosure* is often considered one step above diffusion—though this perception is currently under dispute (Archer & Waterman, 1990). Foreclosed individuals are persons who have formed firm commitments without having faced a period of personal crisis/exploration. Foreclosed individuals have been found to have close relationships with their parents, a high need for social approval,
high levels of authoritarianism and conformity, and low levels of anxiety (see Adams et al., 1987b; Bourne, 1978a, 1978b).

Diffusion is considered the least sophisticated developmental level of identity formation. Diffused individuals have either not yet resolved or faced a crisis/exploration period and have not made strong commitments. Diffusion is characterized by a state of withdrawal, lack of commitment, lack of concern over a crisis or exploration, and by low levels of intimacy (see Adams et al., 1987b; Bourne, 1978a, 1978b).
CHAPTER II
REVIEW OF LITERATURE

Epistemological Foundations of Identity

Nowhere has there been greater philosophical and scientific questioning than over the nature of humanity. Even if elucidated, the complexity of human individuality remains equally perplexing. Erikson (1982) wrote: "I myself could not relate...psychosocial theory without, paradoxically, discussing what is most individual in man and yet what is most basic for a communal sense of 'we'" (p. 85). The venture to operationalize the nature of the self can be traced to antiquity. The fundamental question: What is a person? has been the focus of systematic epistemological inquiry at least as far back as the Classical period. A fitting foundation to such a question is the 4th century B.C. Socratic assumption that an unexamined life—whatever it consists of—is not worth living (Unger, 1990).

Plato promulgated the view that self-conceived perceptions of reality are at best imperfect and transitory. According to Platonism, if a self exists it exists to some degree in uniqueness and isolation from reality. Conversely, Aristotle believed truth exists in perfect form and is discoverable by application of three essential proofs—logos (logic),
pathos (passion), and ethos (personal character) (Golden, Berquist, & Coleman, 1978).

According to the Aristotelian view, in order to discover truth a person must have in oneself and understand about one's self the character traits associated with a truth. If a person's perceptions were imperfect, it is because that person had yet to attain the personal attributes (virtues) requisite to such truth. Aristotle taught that these virtues are incorporated into one's self while engaging in appropriate activities, for the appropriate reasons, at the appropriate levels—the notion of the *golden mean* or finding the balance between dialectical conflicts. Such balance leads to a sense of *eudaimonia*, or joyous (sometimes translated: harmonious) true self—a feeling that what one is and what one does is in harmony with the universe. According to Waterman (1992), Aristotle's concept of *eudaimonia* is similar to the current identity conceptualizations of Deci and Ryan's (1985) intrinsic motivation, Maslow's (1964) peak experience, M. Csikszentmihalyi and I. S. Csikszentmihalyi's (1988) concept of flow, and to his own notion of personal expressiveness.

An equivalent Eriksonian notion would be a "heightened awareness" (Erikson et al., 1986, p. 51). Erikson's theory is consistent with the Aristotelian concept that appropriate activity is a necessary

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1 The Aristotelian notion of virtue is much broader than the modern word usage. For a broader explication, see Aristotle's (1888) *Nicomachean Ethics*. London: G. Belle & Sons.
component of developing the self. Erikson et al. (1986) referred to the process as a *vital involvement* wherein "the vital involvement in the worlds of people, materials, and ideas is the essential basis both for bringing into balance psychosocial tension" (p. 144) and for examining and reexamining personal identifications.

The question over concreteness versus relativeness of one's knowledge about oneself remained when, in the 1600s, Descartes wrote: "It is indeed surprising that I should comprehend more distinctly things that I can tell are doubtful, unknown, foreign to me, than what is real, what I am aware of—my very self" (Descartes, 1954, p. 71). This dilemma lead Descartes to develop a method of addressing such questions in empirical, separatist terms—i.e., questions asked by individuals must be asked apart from the influences which may affect the question asker (Descartes, 1986). In other words, the search for the nature of human identity must assume the facility to divide (separate) psychological and social interactions. Descartes suggested that the more we separate the organism from its environment, the more clearly we will be able to define or explain the organism. This has become known as the Cartesian or "objective" approach—a perspective devoted to disinterested, value-free facts (Unger, 1990).

This point is recognized (and somewhat vital to this assumption of this study) in that Marcia's model has its methodological basis in objectifying Erikson's fifth psychosocial stage—an effort ultimately
incompatible with Erikson's holistic view. Erikson et al. (1986) wrote that:

Although we are considering the themes separately as a gesture at clarity, we must emphasize that reviewing the eight psychosocial themes...in no way represents eight independent processes. Rather, the themes represent a set of perpetually intertwined concerns, inseparable by virtue of their lifelong interconnections.... (p. 144)

By the 1700s, Cartesian empiricism had become the dominant scientific perspective. Hume, however, began to postulate that—on matters related to human nature—the objectivity pendulum had swung too far. In criticism Hume wrote: “This is the practice of talking about people as single beings in spite of the fact that they are constantly changing, and over a period of time may have changed completely” (Penelhum, 1955, p. 573). Hume came to be dissatisfied with an “objective” approach which confines the human domain entirely to reductionism. What Hume did offer was a new type of questioning regarding aspects of human nature. Hume would argue that we cannot ask: what is a person, in the same way we ask: what is a stone. We must instead ask: in what does the identity of a person consist; or more specifically: what are the criteria we use in making judgments about the identity of a person (see Shoemaker, 1963). The issue of criteria has resurfaced in current identity-related theory—including the issue over how Marcia’s operationalization of the identity status relates to broader Eriksonian criteria.
By the end of the 18th century, Hegel furthered the question over how the self is discovered, described, or defined. Hegelian philosophy places humans in a continuous state of becoming; therefore, however one sees an individual, the view is never totally accurate (Hegel, 1977). Now known as the Hegelian tradition, this "subjective" approach also posits that the human organism is inextricably linked to its environment. Therefore, any questions regarding the nature of human identity must include the social, contextual, biological, and developmental forces in which it interacts.

Lorraine (1990) wrote:

...the self cannot be left out of any account of the world because the subject and object are moments in a whole of interpretation. If the self has a transformative effect, if the self creates reality as much as the self is created by reality, then an understanding of the self's motivations and interest will help us understand the constraints on our claims to knowledge. (p. 7)

Viewed from Hegelian philosophy, a personal identity is one's fluxuating interpretation of reality. Identity is developed by an individual's ever-oscillating efforts to verify inner interpretations of worldly experience. Erikson (1982) recognized the issue between the transitory versus permanency of one's identity. He wrote that the coining of the term ego originally stood for "the permanency of conscious experience," and added that its function was to allow for a flexible "mutual activation" with outer reality (Erikson, 1982, p. 89).

Nietzsche saw the question of whether or not the self is real as virtually immaterial. According to Nietzsche (1905), the self is not a
thing or a substance; it is a fiction. A self is not unified, stable, or coherent. If it appears so, it is only because an individual has succeeded in subordinating the profusion of conflicting instincts in such a way that stability and unity appear to align with the ruling milieu. Nietzsche added to the Hegelian view the concept of the "decentered self" or the notion that identity is a chaotic intersection of simultaneous, antisystemic interpretations of ourselves viewed from within and without. Albeit a more extreme view than Erikson's, Nietzsche promulgated the idea that the development of one's identity is not totally conscious or rational.

Early- and mid-20th century theorists, such as James, Mead, and Heidegger, have fully established the study of the self as a valid epistemological field apart from philosophy. Heidegger ensconced the self as a res cogitans or a thinking thing—that an identity is a relationship or a stand we actively develop toward the outside world (Heidegger, 1973). Such a view sees one's identity develop not out of experience but out of process—wherein a person actively evaluates interpretations of one's experiences after the fact.

James' (1910) notion of self led to the concepts of the social self, the material self, and the spiritual self. James (1920) also spoke of the ego's active tension (being similar to the Aristotelian dialectic notion of the golden mean). Erikson studied, adopted, and incorporated James' idea of balance versus extremes as a basic tenet of ego health (Erikson, 1982). This served to demarcate the
epistemological distinction between notions of self and notions of identity. However, the term ego, as used by James, Freud, Mead, and Erikson, is generally synonymous with the term “self”—being translated from the German word Ich and the Latin root eg or, in English I. Mead (1934) further developed the distinction with the I, me, and the generalized other troika, while Freud conceptualized the self as having three interacting dimensions—the id, ego, and superego. Erikson’s adaptations on ego identity were (and still are) consistent with the theoretical commonalities of James’, Freud’s, and Mead’s works.

Erikson (1982) portrayed the ego as having the function of integrating experience in such a way that an individual can be (a) an effective doer rather than an impotent sufferer, (b) active and originating rather than inactive or passive, (c) centered and inclusive rather than shunted to the periphery, (d) selective rather than overwhelmed, and (e) aware rather than confounded. This in turn served to provide a sense of identity or the “sense of being at home in one’s time and place, and, somehow, of feeling chosen even as one chooses” (Erikson, 1982, p. 89). Stemming from the previous works of other theorists, Erikson constructed a series of assumptions on ego identity more sweeping and delineated than had been heretofore presented (Bourne, 1978a).

In summary, issues regarding identity have a long and somewhat systematic evolution. Originally, the concept of self was seen as
pertaining to the realm of philosophers and theologians. Later, in the age of empiricism, the nature of human self was assessed within reductionist, separatist parameters. Eventually, the self was recognized as being so complex, so time- and context-bound, and so individualized, that any conclusion must be viewed as subjective. By the mid-20th century, social scientists promulgated the multidimensionality of the self. This last step has lead to the partitioning of various issues of the self to the realms of diverse fields of study such as psychology, sociology, biology, philosophy, and so forth. Such separating of the study of human behavior or motivation into discrete elements comes at some cost to theory development. Sarason (1981) wrote that:

...theory rests on conceptions about what man is and, therefore, about what he can be...if you start with different assumptions about what man is and is capable of and change the context accordingly, people look and develop very differently...theories and their implementation can be self-fulfilling, for good or bad. (p. 131)

By addressing the numerous psychological, social, and biological aspects of development, Erikson's theory represents an integration of epistemological notions, ancient and modern, into a systematic perspective of the self—of which ego identity is a part.

Foundations of Erikson's Ego Identity Theory

Erikson's conceptualization of ego identity combines the internal psychological aspects of Freud's concept of ego as well as the
sociological aspects presented by James and Mead. Additionally, Erikson's theory of identity development integrates “several novel features not present in any previous conception” (Bourne, 1978a, p. 224). Erikson (1982) wrote that:

...a human being's existence depends at every moment on three processes of organization that must complement each other. There is, in whatever order, the biological process of the hierarchic organization of organ systems constituting a body *(soma)*; there is the psychic process organizing individual experience by ego synthesis *(psyche)*; and there is the communal process of the cultural organization of the interdependence of persons *(ethos)*... in the end, all three approaches are necessary for the clarification of any intact human event. (p. 26)

The underlying assumptions of Erikson's theory are that identity formation (a) develops according to sequences or “analogous patterns” (Erikson, 1982, p. 27); that (b) individual variations are “predetermined in the growing person's readiness” (Erikson, 1963, p. 270); and that (c) society tends to “encourage the proper rate and the proper sequence of their unfolding” (p. 270)—a general process Erikson labeled *epigenesis*.

Congruence among psychological, biological, and social realms of a person's experience will result in healthy identity formation. Erikson (1968) wrote:

The young person, in order to experience wholeness, must feel a progressive continuity between that which he has come to be during the long years of childhood and that which he promises to become in the anticipated future; between that which he conceives himself to be and that which he perceives others to see in him and to expect of him... The wholeness to be achieved at this stage I have called a sense of inner identity. (p. 87)
This identity process assumes role-taking and cognitive capacity at levels at least sufficient to execute dialectic choice (i.e., good versus bad, one’s own perspective versus other’s [or society’s] perspective) (Adams, 1992). Considering normal cognitive, biological, social, and historical development, Erikson posits that identity development is most expedient during adolescence (Erikson, 1968).

The interrelating psychosocial aspects of the identity stage are numerous and varied. As with each of the other stages, the identity stage results in either a healthy balance or an unhealthy imbalance (an extreme in either direction). An excessive identity would be maladaptive as would excessive identity confusion (Erikson et al., 1986). According to Erikson, a healthy identity results from (and exists in) the creative tension involved in balancing a sense of identity and identity (role) confusion.

The primary dimensions of concern to the adolescent identity stage involve (a) the identity crisis, (b) ego versus superego dominance, (c) a humanistic versus technological orientation, and (d) an appropriate value orientation (Cote & Levine, 1987). The identity crisis, as portrayed by Erikson (1968), is “a necessary turning point, a crucial moment, when development must move one way or another, marshalling resources of growth, recovery, and further differentiation” (p. 16). This complex interaction involves (a) constitutional givens,
(b) idiosyncratic libidinal needs, (c) favored capacities, (d) significant identifications, (e) effective defenses, (f) successful sublimations, and (g) consistent roles (Erikson, 1968).

Erikson (1968) stated that the issue of ego/superego dominance impacts identity development in that a counterbalancing of childhood inequalities and a weakening of the dominance of the superego helps lead to a positive identity. According to Cote and Levine (1989), Erikson assumes that an ego-dominated identity is the “most desirable outcome of the identity stage in contemporary society” (p. 392).

Erikson (1968) additionally spoke of two basic sources of contemporary identity and identity confusion: faith in technology or in a kind of humanism. A technological orientation is to have a higher degree of confidence in social, political, and technological structures, whereas, a humanistic orientation is having a higher degree of belief in the subjectivity of humankind and its agencies. Because people “become what they do” (Erikson, 1968, p. 31), resolution of this aspect of identity occurs best during a time of tentativeness and questioning—indicative of the institutionalized moratorium of adolescence (Erikson, 1968).

The fourth factor pertinent to identity development is the development of a value orientation. Erikson suggested three hierarchal value orientations (a) the moral, (b) the ideological, and (c) the ethical. The moral stage is a childlike belief in authority. The ideological stage, often associated with adolescence, entails the attempt to reconcile or
adapt to social contradictions. The ethical stage is a more advanced, possibly elaborate, framework from which an individual accounts for what things are, why things are, and how things ought to be.

According to Erikson (1968), identity formation may take a variety of possible courses. It is assumed that an identity crisis has certain discernible elements (a) its occurrence, (b) its severity, (c) its prolongation, and (d) its aggravation. Furthermore, Erikson relates such dimensions of identity formation as capable of enhancing (or detracting from) developmental outcomes, adaptiveness, life-structure, continuity, mutuality, flexibility, existential meaning, and purpose. Many of these terms have specific Eriksonian connotations regarding identity (see Erikson, 1959, 1968, 1982). By adaptiveness, Erikson refers to one’s capacity for positive social interaction. Continuity is a sense of being at home with one’s self. Mutuality is a sense of reciprocal relationship with others. Existential meaning refers to the capacity to see one’s relationship to the world. Purpose concerns one’s motivation to live one’s identity.

Evolving aspects of each previous stage are pertinent to the resolution of the identity stage. Furthermore, identity issues “in some form” are pertinent throughout the life-span (Erikson, 1963, p. 271). Therefore, for Erikson, identity development is similar to the Hegelian and Nietzschian temporal-spatial conception that identity is often transitory, volatile, and irresolute. Were this not the case, the syntonic and dystonic balance following any normal stage resolution
would be considered too permanent and inflexible, thus preventing the resolution (for good or bad) of issues inherent to subsequent stages.

While it is not yet empirically established, Eriksonian theory presumes that individuals do not get indefinitely “stuck” in a stage. That a stage may be prolonged appears so, but a person must nonetheless move on to subsequent age-related stages regardless of resolution of previous stages. With regard to the identity stage, even a most protracted moratorium must eventually come to an end (Erikson, 1968). While the end of a stage is frequently referred to as a developmental product or outcome, such concrete delineations between stages are not empirically precise and still theoretically unclear (Caillet & Michael, 1983). For this reason, Eriksonian notions of development (particularly, intrastage development) may be viewed as being processes rather than outcomes or products. The extent to which process or product prevails over the other is currently under theoretical dispute. However, Erikson has pointed out that the English language lacks appropriate semantic differentiation between becoming something and being something (Erikson et al., 1986).

Erikson’s notion of ego identity is not simply the sum of one’s reflections, perceptions, and cognition of oneself. Bourne (1978a) wrote that Erikson’s theory differs from purely psychological theories in that ego identity includes “a sense of oneself defined in terms of a particular relationship to a certain group, community, or society” (p.
The broadest definition of the Eriksonian notion of identity is an ongoing process of formation, consolidation, and reconciliation between past experience, present crises, and future expectations (Erikson, 1968).

In relation to previous theoretical perspectives, Erikson's epistemological foundations of ego identity appear to take an intermediate position between the objective/concrete/lasting dimensions (as promoted by Cartesian perspective) and the subjective/immaterial/ephemeral dimensions (as promoted by the Hegelian perspective). On the one hand, Erikson supports Cartesian objectivity with the existence of a framework of systematic and universal sequences/issues of development. On the other hand, Erikson allows for Hegelian subjectivity with almost infinite human variation within such a framework. Erikson's view of identity seems most consistent with Heidegger's notions of the self: that being human is treated as a relation in which one takes a stand towards one's everyday activities, and that to be human is to be a placeholder of internal relations with the outside world (Heidegger, 1973).

This brief review serves not as a definitive explication of Erikson's theory but to illustrate the vastness and complexity of his conceptualization of ego identity development. Furthermore, it expounds the similarities and uniqueness Eriksonian theory has to his epistemological predecessors.
Foundations of Marcia’s Ego Identity Status Paradigm

Marcia’s original research on identity status was devised to establish the “empirical validity of an important part of Erikson’s psychosocial theory”—that of ego identity (Marcia, 1989, p. 401). Theretofore, studies had not dealt “explicitly with the psychosocial criteria for determining degree of ego identity” (Marcia, 1966). Marcia (1989) later recalled of the venture that “there was no intention that anything especially practical, except good theory, would ever result from it” (p. 401). The ego identity status model has become a standard from which numerous psychosocial, psychological, sociological, academic, personality, intelligence, interpersonal, and moral studies have been (and continue to be) based and/or compared (Bourne, 1978a). Furthermore, Marcia’s paradigm has become the primus inter pares operationalization of the identity stage (Cote & Levine, 1988a).

Marcia’s (1966) attempt to validate Erikson’s notion of identity achievement/diffusion began with the operationalization of the identity statuses as “polar outcomes...along a continuum” (p. 551). The criteria Marcia used to contrive the statuses consisted of two variables, crisis (i.e., exploration) and commitment. These criteria were assessed by measuring three content areas: occupational choice, religion, and political ideology (Marcia, 1966).
Marcia (1966) defined the identity crisis as a period of exploration during adolescence when an individual is engaged in evaluating past beliefs, weighing meaningful alternatives, and considering choices. Marcia defined commitment as the degree of personal investment an individual exhibits toward his/her beliefs. Using exploration/commitment criteria, Marcia (1966) contrived four identity statuses: identity-achieved, moratorium, foreclosed, and identity-diffused. The identity-achieved status is assumed to be the most adaptive of the statuses. Such an individual has firm commitments following an active period of exploration. The achieved individual is seen as most "free to act" and, in general, not likely to be "overwhelmed by sudden shifts in his environment or by unexpected responsibilities" (Marcia, 1966, p. 552).

When compared to other statuses, identity-achieved individuals have been found to be less worried and less extreme in their introversion or extroversion (Adams, Ryan, Hoffman, Dobson, & Nielsen, 1985). They also appear to be more adaptive and open in family functioning (Papini, Micka, & Barnett, 1989). They tend to exhibit high levels of intimacy (Bennion & Adams, 1986), low levels of self-consciousness (Adams, Abraham, & Markstrom, 1987), and are most content with working either alone or with others (Kroger, 1990). Identity-achieved subjects scored significantly higher than foreclosed or diffused subjects on measures of cognitive development and decision-making (Blustein & Phillips, 1990). Achieved individuals also scored
highest on a general measure of psychological development (Owen, 1984). Overall, these correlates are consistent with Marcia's portrayal that identity-achieved individuals are strong, self-directed, and highly adaptive (see Waterman, 1992). From clinical studies of persons in each status, Josselson (1973) presented the perspective of the achieved identity as: "I have an effect on the world, therefore I am."

The identity-diffused subject, whether or not he/she has experienced a crisis, is primarily characterized by lack of commitment. This lack of commitment is assumed to stem from apathy and disinterest (Marcia, 1966). Without repeating the studies previously listed under identity-achievement, diffused persons have typically been found to be stressed, to be either introverted or extroverted, to lack intimacy, and to have few close opposite-sex friends. Diffused subjects score lower (compared to achieved youths) on cognitive development, formal reasoning, decision-making, and moral reasoning. Diffusions have been found to be withdrawn, yet most desirous for relatedness with others (Kroger, 1990), highly influenced by peers and authority demands (Adams et al., 1985), and highly self-conscious (Adams et al., 1987a). Diffusions also report the highest rates of illicit substance use (Jones & Hartmann, 1988). These findings, too, are consistent with Marcia's characterization of diffused persons—that they are likely to be either highly careless, passive, defensive, and/or psychopathic (Waterman, 1992). Josselson (1973) portrayed the diffused identity perspective as: "I feel, therefore I am."
In terms of adaptability and overall identity development, the identity status considered next to identity achievement is moratorium. In support of this proposition, moratorium individuals score similar to achieved individuals on numerous measures (see Adams et al., 1987a). This similarity has emerged for measures of introversion/extroversion (Adams et al., 1985). intimacy (Bennion & Adams, 1986), and decision-making (Blustein & Phillips, 1990). However, moratoriums scored lowest on a general measure of psychosocial development (Owen, 1984). Compared to foreclosed/diffused persons, moratoriums also show lower levels of self-consciousness (Adams et al., 1987a).

Persons in moratorium are presumed to be in a crisis period—which assumes an active struggle to make commitments (Marcia, 1966). Moratoriums appear least willing to be subordinate to group leaders (Donovan, 1975); they score lowest on measures of authoritarianism (Bennion & Adams, 1986), and they are least likely to be dependent on familiar settings (Kroger, 1990). These findings are consistent with Marcia’s notion that there are healthy and pathological aspects to each identity status (achieved status excepted) and his depiction of moratorium individuals as likely to be either highly sensitive or anxious, highly ethical or self-righteous, and highly flexible or vacillating (see Waterman, 1992). Josselson (1973) portrayed the moratorium perspective as: “I am right, therefore I am.”

The remaining status is foreclosed, describing individuals who accept—apparently without crisis or questioning—the wishes and
beliefs of their parents or other authority figures (Marcia, 1966). The personality of a foreclosed person is characterized as rigid and closed-minded (Bennion & Adams, 1986). Foreclosed individuals have been found to be impulsive (Cella, DeWolfe, & Fitzgibbon, 1987), more dependent on others in decision-making activities (Blustein & Phillips, 1990), and they seek the security of familiar settings (Kroger, 1990). Read, Adams, and Dobson (1984) found that foreclosed individuals were not likely to be analytical or philosophical. Foreclosures report themselves to be very close to their parents (Campbell, Adams, & Dobson, 1984), and they are most likely to have come from an intact family (Streitmatter, 1987). In a study by Owen (1984), foreclosed individuals scored second only to achieved individuals on a general measure of psychosocial development. Overall, these correlates are consistent with Marcia’s portrayal of foreclosed individuals as being—according to one’s interpretation—either highly rigid or steadfast, highly dogmatic or committed, and highly conforming or cooperative (see Waterman, 1992). They have the lowest frequency of illicit substance use (Jones & Hartmann, 1988). Josselson (1973) referred to the foreclosure as: “I am loved, therefore, I am.”

The aforementioned findings associated with each status are a representation of findings made since Bourne’s (1978a, 1978b) review of identity (see also the Adams et al., 1987b review). Additionally, from 1988 through early-1992, over 50 studies and 30 dissertations have
involved the ego identity status paradigm (APA, 1992). One dissertation on identity status differences between Anglo and Cuban American males (Owen, 1984) found that only the achieved status was positively related to general psychosocial development \((r = .29)\)—as measured by the Inventory of Psychosocial Development (Constantinople, 1969) and the Objective Measure of Ego Identity Status (Adams, Shea, & Fitch, 1979). Negative relationships between identity status and general psychosocial development were (from highest to lowest): moratorium \(r = -.39\), diffused \(r = -.36\), and foreclosed \(r = -.29\) (Owen, 1984). The negative correlation between moratorium status and psychosocial development may point to theoretical and/or measurement discrepancies between Erikson's and Marcia's paradigms. Either the models are not totally compatible or the sample and/or measures used in Owen's (1984) study were inadequate and/or inappropriate.

By broadly (and subjectively) categorizing findings which may pertain to issues related to psychosocial developmental, a general profile may indicate a relationship between identity status and Erikson's first four stages. One of the difficulties in interpreting identity status studies based on Eriksonian theory is that few, if any, of the identity status studies can be easily (not to mention definitively) related to a psychosocial concept (i.e., shame/doubt, guilt; initiative, industry, etc.). Furthermore, resolution of an Eriksonian stage is based on the notion of dialectic balance between the syntonic and dystonic
aspects of a stage. Simply because a study finds that moratorium status respondents have high levels of autonomy does not necessarily indicate they have an appropriate balance between autonomy or shame/doubt or that shame/doubt has even been measured. This difficulty of identifying balanced resolution is present even in Eriksonian-based measures (see Caillet & Michael, 1983). For this reason, only studies which included descriptors related to balance (i.e., flexible, adaptive, less extreme) were categorized as resolved.

Previous identity status research relating to Erikson’s first four psychosocial stages (Tables 1-4) is indicative of the following: (a) an absence of studies which relate any resolved or syntonic psychosocial trait to the diffused status indicates a general lack of resolution across all four psychosocial stages; (b) the predominance of studies which relate resolved and syntonic traits to the achieved status indicates broad psychosocial resolution across all four psychosocial stages; (c) the mixture of studies which related syntonic and dystonic traits in the moratorium and foreclosure statuses indicates moderate or transitory psychosocial resolution. In particular, foreclosure status is indicative of higher levels of trust and lower levels of autonomy. Moratorium status is indicative of on-going crisis in the autonomy versus shame/doubt stage. These interpretations are consistent with current identity status theory (Stephen, Fraser, & Marcia, 1992).
## Table 1

### Studies Related to the Achieved Status and Psychosocial Development

<table>
<thead>
<tr>
<th>Trait</th>
<th>Syntonic Trait</th>
<th>Balanced/Resolved</th>
<th>Dystonic Trait</th>
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<tbody>
<tr>
<td>trust/ mistrust</td>
<td>more adaptive and open in family functioning (Papini, Micka, &amp; Barnett, 1989)</td>
<td>more close relationships (Orlofsky, Marcia, &amp; Lessor, 1973)</td>
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<tr>
<td>autonomy/ shame and doubt</td>
<td>content with working alone or with others (Kroger, 1990)</td>
<td>low levels of self-consciousness (Adams et al., 1987b)</td>
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<tr>
<td>initiative/ guilt</td>
<td>flexible decision-making (Blustein &amp; Phillips, 1990)</td>
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</tr>
<tr>
<td>industry/ inferiority</td>
<td>higher motivation to achieve (Orlofsky, 1977)</td>
<td>less extreme in introversion or extroversion (Adams et al., 1985)</td>
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### Table 2

**Studies Related to the Moratorium Status and Psychosocial Development**

<table>
<thead>
<tr>
<th>Syntonic Trait</th>
<th>Balanced/Resolved</th>
<th>Dystonic Trait</th>
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<tbody>
<tr>
<td>trust/mistrust</td>
<td>more close relationships (Orlofsky et al., 1973)</td>
<td>highest on anxiety (3 studies)</td>
</tr>
<tr>
<td>autonomy/shame and doubt</td>
<td>least willing to subordinate to leaders (Donovan, 1975)</td>
<td>low self-consciousness (Adams et al., 1987b)</td>
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<td></td>
<td>lowest on submissiveness (Bennion &amp; Adams, 1986)</td>
<td>most likely to change major (Waterman &amp; Waterman, 1974)</td>
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<tr>
<td></td>
<td>least likely to be attached (Kroger, 1990)</td>
<td>flexible decision-making (Blustein &amp; Phillips, 1990)</td>
</tr>
<tr>
<td>initiative/guilt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>industry/inferiority</td>
<td>higher motivation to achieve (Orlofsky, 1977)</td>
<td>less extreme in introversion or extroversion (Adams et al., 1985)</td>
</tr>
<tr>
<td>Study Areas</td>
<td>Syntonic Trait</td>
<td>Balanced/Resolved</td>
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<tr>
<td>trust/ mistrust</td>
<td>submissive to authority (5 studies)</td>
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<tr>
<td></td>
<td>seeks security of familiar settings (Kroger, 1990)</td>
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</tr>
<tr>
<td></td>
<td>close to their parents (Campbell et al., 1984)</td>
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<tr>
<td>autonomy/ shame and doubt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>initiative/ guilt</td>
<td>impulsive (Cella et al., 1987)</td>
<td></td>
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<tr>
<td>industry/ inferiority</td>
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<tr>
<td>Trait</td>
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Marcia's Convergence/Divergence with Erikson

It is generally recognized in the field of developmental psychology that Erikson's theory is vast and complex and, therefore, difficult to translate, operationalize, and validate. Marcia took one aspect of Erikson's theory, stage five, and made such an attempt. This has resulted in the ego identity status paradigm being seen by many as the most appropriate means to empirically investigate Eriksonian theory on the identity stage.

However, a debate has surfaced in recent years regarding the use of Marcia's paradigm as a means to capture the intent of Eriksonian psychosocial theory. This debate was voiced largely through the arguments of Cote and Levine (1987, 1988a, 1988b, 1989). In opposition to the notion of convergence with Erikson's theory, Cote and Levine (1988b) contended that Marcia's paradigm focuses too much on limited operational definitions and not enough on underlying theoretical definitions, and that it amounts more or less to tautology. Waterman (1988) characterized the arguments of Cote and Levine as a "deceptively effective critique" (p. 185). The following summary of those issues is offered with the caveat that neither their arguments nor this study is designed to definitively resolve this dispute.

Marcia's paradigm has addressed, more so than any previous attempt, at least one important issue of identity—namely the formulation of commitments. However, Cote and Levine (1988a)
claimed this has led to an overemphasis on psychological aspects of identity formation. They argued that to be consistent with Erikson's theory, Marcia's model should also include sociological, historical, biological, and familial aspects of identity development. Cote and Levine (1988b) concluded that Marcia's model is too limited in scope to tap the broad and complex aspects of identity development.

Waterman (1988) argued that such narrowing is not wrong, but necessary and customary in empirically based, psychological research. Waterman (1988) stated that Marcia never intended to produce a model which entirely blanketed Erikson's theory. It seems reasonable to embrace a theory while at the same time "focus on different descriptive elements and on different functions" of that theory (Waterman, 1988, p. 187).

Because Marcia's paradigm is parsimonious and easily grasped, some researchers are beginning to augment his model as well. Archer (1989) and Stephen et al. (1992) pointed to an identity cycle referred to as MAMA (moratorium-achiever-moratorium-achiever). Another possible cycle is foreclosure-moratorium-foreclosure-moratorium (FMFM), and so forth. Kroger and Haslett (1991) and Bosma (1992), too, have suggested that ego identity has several pathways. Other theorists have suggested that the use of substatuses (viz., alienated achievers, expressive foreclosures, nonexpressive moratoriums) will further the utility of Marcia's paradigm (Waterman, 1992).
Josselson (1973), however, wrote that this type of unrestrained theoretical evolution has produced an "uninterpretable mass of findings...[which] often strayed from theoretical underpinnings which might guide interpretation of results" (p. 7). It may be viewed by some that identity status researchers are including elements theoretically different from Erikson’s notions. Cote and Levine (1988a) made the point that most of Erikson’s work on the identity stage came out after Marcia developed his paradigm in 1964—a situation analogous to the egg laying the chicken. However, it could equally be argued that theories are not definitive, and without change they may never fully mature. Furthermore, the groundwork for Erikson’s theory—including his ideas on ego identity development—originated in 1950. In either case, occasional comparisons need to be made to insure that both theories are still compatible. Erikson (1982) wrote that while theorists “can and must always discover such ‘new’ aspects of human nature as are reflected in the epidemiological trends of the times, their interpretation must, at any given time, allow for...historical relativity” (p. 31).

Another concern of Cote and Levine is that Marcia has portrayed identity achievement as a status or outcome, rather than a process. Marcia, himself, (1989) has responded to this point saying:

It is with some vexation that, in the face of continued misunderstanding, I find that I must repeat what I said about ten years ago: “The identity process neither begins nor ends with adolescence... Resolution of the identity issue at adolescence guarantees only that one will be faced with
subsequent identity 'crises.' A well-developed identity structure, like a well-developed superego, is flexible. It is open to changes in society and in relationships." (p. 406)

The resolution of this issue may lie in Bosma's (1992) notion of multiphase identity development, or Kroger and Haslett's (1991) concept of multipathway development, or Waterman's (1992) theory of multidimension development. Others have also suggested that separate domains exist for males and females (Cella et al., 1987). But if it is true that identity development has such interstatus transience and/or intrastatus variability—and this is not certain (see Streitmatter, 1993; Stephen et al., 1992; & Waterman, 1982)—it is reasonable to question the use of the term status. Waterman (1988) agreed that the term is somewhat awkward and potentially confusing, but defends the use of Marcia's terms based on their wide use and recognition. On the other hand, Erikson (1982) has stated of such situations that “terminology...has come to convey a certain ritualistic conviction rather than the persistent hope of strict scientific substantiation” (p. 17).

Another concern rises over the question of whether or not Marcia's identity statuses are elitist, in that they (a) portray a type of identity achievement which is not within the norms of society, and (b) portray the most preferred path of development as always going through the moratorium status. The Archer and Waterman (1983) review of numerous studies on adolescent (most often college students) identity development concluded that only a minority (as low as 4%) of adolescents were categorizable as identity-achieved, and that
a majority of adolescents are most likely to be categorized as foreclosed or diffused (see also Archer & Waterman, 1990). Waterman (1988) did point out that when identity status scores of college age subjects are broken down into specific identity content domains of vocational choice, religion, and political ideology, the percentage of individuals categorized as achieved rises to 40%, 25%, and 20%, respectively.

Despite issues of measurement, Waterman (1988) contended that Marcia's model shares many communalities with Erikson's theory. These include the contextual domains of vocation, religion, politics, parental influence, and so forth. Furthermore, Marcia's paradigm recognizes the importance of development in early and later Eriksonian stages while at the same time restricting application of identity status theory to adolescence. Marcia's paradigm also corresponds to Erikson's view of identity stage development in that it is conflict-driven and progressive from initially amorphous to highly delineated.

Waterman (1988) pointed out areas where Marcia's paradigm diverges from Erikson's theory. For example, Waterman claimed many theorists have adopted the psychodynamic view of Marcia, while rejecting Eriksonian concepts which are psychoanalytical or psychosexual. Waterman also recognized Marcia's and Erikson's differing views with regard to methodological approach—Erikson's
being largely clinical and Marcia's being empirical. Waterman (1988) wrote:

Since idiographic and nomothetic methodologies generate different types of knowledge, it is not to be expected that the theories derived from work with the respective paradigms will map onto each other with one-to-one correspondence. (p. 197)

Therefore, both Waterman (1988) and Cote and Levine (1988a, 1988b) have agreed that Marcia's paradigm differs from Erikson. Adams, however, (1992) did not see this as an issue; he wrote that as researchers...continue their work we shall see many differing and viable alternatives to the study of adolescent identity formation and development that began with the theoretical foundations of Erikson... followed by the conceptualization and measurement of ego-identity statuses as constructed by Marcia, which are now being deconstructed, reconstructed, and modified by a different generation of scholars. (p. 8)

It is important to be cognizant of the fact the theories do not develop in a vacuum; what affects one will eventually affect others. This leads to the foremost issue of this debate: Has the evolution of Marcia's paradigm coincided with or become separate from the evolution of Erikson's theory? Cote and Levine (1988a, 1988b) have argued that the simplicity of Marcia's model (including its purportedly narrower scope, limited definitions, potentially confusing terms, and even the reliability of its instruments) has lead researchers to either deliberately or unwittingly ignore or misunderstand the broader notions of Erikson's theory of identity development. Erikson seems to agree this could happen. Erikson (1968) wrote that:
...for the sake of logical or experimental maneuverability (and in order to keep in good academic company) they try to treat these terms as matters of social roles, personal traits, or conscious self-images, shunning the less manageable and more sinister—which often means the more vital—implications of the concept. (p. 16)

The evolution of Marcia’s paradigm will likely have an effect on the interpretation, application, scope, direction, and overall evolution of Eriksonian theory. In some cases, studies which were based on Marcia’s model have lead researchers to question the validity of Erikson’s theory. For example, Archer (1989) summarized an identity status-based study by stating that “it appears that the identity activity of our adolescents and youth does not meet the expectations of Erikson’s theory” (p. 353). In this case either Erikson’s theory appears faulty or Marcia’s paradigm is inappropriately linked with Erikson’s theory.

Establishing the nexus between varying notions of identity is seen by theorists and researchers alike as a “catalyst for the creation of many new and emerging perspectives” (Adams, 1992, p. 3). Of course, many already see Erikson’s original theory as such a broad and practical approach. What is not clear is how Marcia’s paradigm relates to it.
CHAPTER III
METHODOLOGY

Research Questions and Design

In order to assess the relationship between Marcia’s identity status paradigm and Erikson’s psychosocial theory, the following null hypotheses will be addressed.

1. The achieved status will not differ from the moratorium status on measures of trust, autonomy, initiative, and industry.

2. The achieved status will not differ from the foreclosed status on measures of trust, autonomy, initiative, and industry.

3. The achieved status will not differ from the diffused status on measures of trust, autonomy, initiative, and industry.

4. The moratorium status will not differ from the foreclosed status on measures of trust, autonomy, initiative, and industry.

5. The moratorium status will not differ from the diffused status on measures of trust, autonomy, initiative, and industry.

6. The foreclosed status will not differ from the diffused status on measures of trust, autonomy, initiative, and industry.

This multi-instrument, correlational study is designed to increase discrimination between identity statuses and psychosocial maturity. The four independent variables are psychosocial maturity
scores as measured on stages one through four of the Eriksonian Psychosocial Stage Inventory (EPSI) (Rosenthal et al., 1981), as well as by separate, stage-related instruments—the trust stage by the Interpersonal Trust Scale (Rotter, 1967), the autonomy stage by the Emotional Autonomy Scale (Steinberg & Silverberg, 1986), the initiative stage by the Initiative/Guilt subscales of the Ego Stage Development Inventory (Caillet, 1980), and the industry stage by the Self-Efficacy Scale (Sherer et al., 1982). The dependent variable is identity status as determined by classifications on the Extended Objective Measure of Ego Identity Status (EOM-EIS-2) (Bennion & Adams, 1986).

The four subscores of the EPSI and the separate stage measures corresponding to each psychosocial stage will provide a basis to compare psychosocial maturity with the four identity statuses. If, as has been suggested since the inception of the identity status model, identity status and psychosocial maturity are related, the achieved status will correspond to higher levels of adaptiveness on all psychosocial measures. Scores of diffused status respondents are expected to be characteristically lower across all psychosocial measures. Foreclosed and moratorium individuals are expected to report mixed levels of psychosocial adaptiveness. In particular, it is expected that the foreclosed status will be related to higher levels of trust and lower levels of autonomy than the moratorium respondents.
Measurement

In order to assess psychosocial/identity status relationships, two instruments pertaining to each of the first four psychosocial stages (trust, autonomy, initiative, industry) are included in this study. Each separate stage instrument was selected based on construct validity and reliability studies.

An essential matter of importance to this study is the amount of shared variability between and within psychosocial stage measures. In order to maximize the variation between Eriksonian stages as they relate to the different identity statuses, it is vital that shared variation across trust, autonomy, initiative, and industry is neither too large nor too small. This is a paradox for if, as Erikson suggests, the resolution of a given stage is contingent upon resolution of a previous stage, then an unspecified amount of shared variability is expected. On the other hand, in order to be of empirical value, measures must show an adequate degree of uniqueness.

Therefore, it is essential that each measure has a proximate conceptual relationship to (while also maintaining adequate distinction from) Eriksonian stage theory. By utilizing separate and somewhat distinct measures it is expected that global correlations between psychosocial measures and developmental stages are minimized—thereby reducing the likelihood of systematic variance associated with a particular measure (Caillet & Michael, 1983).
The Extended Objective Measure of Ego Identity Status

The original Objective Measure of Ego Identity Status (Adams et al., 1979) was developed not only as a less costly alternative to Marcia's measure (which established a subject's ideological identity status via in-person interviews), but as a means to assess shifts in a subject's thinking on Marcia's three content domains (Adams et al., 1987b). Later, in an attempt to address additional Eriksonian facets of identity, the EOM-EIS-1 incorporated interpersonal aspects such as friendship, dating, sex roles, and recreation (Grotevant & Adams, 1984). The current version, the EOM-EIS-2 (Bennion & Adams, 1986), consists of 64 questions scored on a 1-6 Likert scale. The questions measure eight identity status subscales (viz., politics, philosophy, religion, dating, recreation, friendship, sex roles, and dating) comprised of interpersonal and ideological aspects for each of the four identity statuses.

To be categorized into an identity status, scores on the subscales must be at least one standard deviation above the group mean on one—and only one—of the four status distributions. Persons scoring above one standard deviation from the mean on multiple scales are considered in transition and are not categorized into a pure status. Persons whose scores fall one standard deviation below the mean cutoff on more than one distribution are also traditionally not categorized into a pure status.
A recent study has looked at the effect of lowering the minimum level for categorizing to .50 of a standard deviation (Jones, Akers, & White, 1993). Such a technique provides comparable findings while increasing pure classifications from 33% to about 42%. In order to maximize the percentage of categorizable subjects in a sample, this study utilizes the Jones et al. (1993) method.

Evidence of construct validity using correlations with six theoretically unrelated constructs (e.g., verbal ability and academic achievement) ranged from -.25 to .22, accounting for only 6.25% of the variance (Grotevant & Adams, 1984). Test-retest correlations for stability (over a 4-week period of time) ranged from .59 to .82 (Grotevant & Adams, 1984). Reliability estimates for subscales (internal consistency) from 13 studies using the EOM-EIS-2 ranged from .30 to .89, with a median alpha of .66 (Adams et al., 1987b). A 3-year, longitudinal study by Streitmatter (1993) utilizing the EOM-EIS found no significant differences between males and females on identity development. Overall, the review of Adams et al. (1987b) yields evidence of high reliability and concurrent validity for the EOM-EIS. A study by Jones and Streitmatter (1987) on the validity and reliability of the EOM-EIS concurred that the measure is an appropriate tool for assessing identity development in adolescent samples.
The Eriksonian Psychosocial Stage Inventory

Only a handful of measures has attempted to assess several stages/levels of psychosocial development. None have shown multifactorial construct validity—a primary reason for using additional (separate) instruments for each Eriksonian stage in this study.

The Eriksonian Personality Scale Inventory (EPSI) was designed to measure Erikson’s first six stages among late adolescents—primarily college students (Rosenthal et al., 1981). It is a self-administered questionnaire consisting of 12 Likert questions for each of the first six syntonic psychosocial stage traits.

Estimates of internal consistency range from .73 on the Intimacy subscale to .81 on the Initiative subscale. Jones and Anderson (1993) have shown evidence of a moderate degree of shared variation between EPSI subscales when administered to children and pre-adolescents—ranging from $r = .46$ (autonomy with industry) to $r = .69$ (autonomy with identity). Overall, the shared variability between scales averages 29.3%. EPSI subscales, therefore, average over 70% unique variability, “thus justifying their utility to assess distinct psychosocial characteristics associated with unique...stages of development” (Jones, & Anderson, 1993, p. 8) for children.

However, Eriksonian measures administered to older adolescents and adults have yet to clearly establish the uniqueness of one stage from another. A factor analysis on the EPSI showed that items for all six subscales loaded on only two factors during late
adolescence: labeled trust and autonomy (Gray, Ispa, & Thornburg, 1986). Logan (1986) also found two factors—which he titled existential and instrumental—and suggested that Erikson's first three stages are essentially repeated in a more sophisticated way during the second three stages. A factor analysis using multiple measures (not including the EPSI) purporting to tap Eriksonian stages also found a lack of construct uniqueness across all of the first four stage subscales (Caillet & Michael, 1983). Rather than tapping unique psychosocial stages, these developmental measures may simply be assessing "a global construct unique to that particular test" (Caillet & Michael, 1983, p. 206). Therefore, it is not known whether Erikson's theory is inaccurate in the claim that distinctive stages function throughout the life-span or whether "Eriksonian" measures have yet to tap or distinguish the stages.

While the question of shared variance is potentially problematic, the EPSI appears to be the most appropriate measure available to assess the various Eriksonian stages. Additionally, the following stage-related measures should aid in illuminating the differences between the first four psychosocial stages.

Rotter Interpersonal Trust Scale

As previously mentioned, Erikson's psychosocial notions of basic trust as a central element of a healthy personality are found in evolving forms throughout the life-span. Rotter's conceptualization of trust
differs somewhat from Erikson’s. Rotter (1967) defined trust as a generalized expectancy that the word, promise, or statement of an individual or group can be relied upon. Still, the fundamental elements for defining trust appear to be quite similar in many regards for both viewpoints. Both attempt to capture the degree to which an individual believes, has expectation toward, and/or relies upon others (particularly parents or other authority figures) based upon past interpersonal experiences.

The Rotter Interpersonal Trust Scale (IT) is particularly relevant to this study as it was developed specifically for late-adolescent subjects. Numerous studies have provided evidence of construct validity for the IT scale (see Robinson, Shaver, & Wrightsman, 1991). Factor analysis reveals the presence of two factors: trust of family agents and peers, and trust in institutions and political authority.

The IT was developed in the mid-1960s and continues to rank as one of the foremost self-administered measures of trust. In its current form the scale consists of 25 Likert response items. The psychometric properties of the IT scale were addressed between 1964 and 1969 with a sample of 4,605 undergraduate students (Hochreich & Rotter, 1970). Split-half reliability for the IT scale was .76. Test-retest reliability, across an average of 3 months, was .68 (n = 42). Analysis of variance showed no significant differences by age, gender, or number of semesters in college. Modest, but significant, positive relationships did exist with religion and SES.
Construct validity was determined through comparisons to the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) and to seven sociometric ratings (which included dependency, trust, gullibility, trustworthiness, popularity, friendship, and self-report of trust). The correlation between the IT and the sociometric trust score produced a correlation of .37. Almost all other correlations were in the expected direction (ranging from .23 to .55). There was no relationship between the IT and gullibility, and a negative relationship was found between the IT and dependency ($r = -0.23$). Trusting individuals saw themselves as less dependent upon others. This is consistent with the Eriksonian position that trust is a necessary prerequisite to autonomy.

**Emotional Autonomy Scale**

The theoretical conception of autonomy is not new; however, empirical operationalizing of the term has yet to secure consensus among theorists and researchers. Perhaps this is due in part to the fact that the various phenomena from which autonomy issues seem inextricably related are many. Autonomy has been characterized variously as a sense of detachment, the outcome of individuation, resistance to peer or parental pressure, a sense of independence, self-confidence in decision making, and so forth (Steinberg & Silverberg, 1986).
While it is not vital that every possible parameter of autonomy is present in a measure of autonomy, it seems reasonable that such a measure tap the broad issues related to psychosocial development, and, in particular, the issues of autonomy as they relate to adolescence. The Steinberg Emotional Autonomy Scale (EA) was originally designed to assess, in early adolescents, prominent aspects of psychosocial development. The measure has been used in studies of late adolescents as well. Indeed, a validity study concluded that the EA scale is probably "more salient to college students, who are, in fact, away from home and experiencing more pressure toward self-reliance" (Ryan & Lynch, 1989, p. 354) and related autonomy issues.

The EA scale consists of 20 Likert items. A validation study was conducted with 865 adolescents ranging in age from 10-16 (Steinberg & Silverberg, 1986). Factor analysis revealed four factors, entitled: perceives parents as people (six items, alpha = .61), parental deidealization (five items, alpha = .63), nondependency on parents (four items, alpha = .51), and individuation (five items, alpha = .60). A three-way ANOVA was performed regarding age, gender, and SES. The strongest statistical difference was the positive, linear, upward relationship of autonomy to age. No SES differences were found.

Gender differences were less strong, with girls scoring higher overall than boys. This finding generally is contradictory to the findings of other studies. However, Steinberg & Silverberg (1986) dismissed the incongruity with the suggestion that boys may report
more accurately about the *salience* of autonomy than about the *manifestation* of autonomous behavior "precisely because boys have so much trouble establishing autonomy in a genuine and real sense" (1986, p. 849). Secondly, Steinberg and Silverberg (1986) suggested that theory and findings in the 1950s and 1960s about sex differences may need revision in that:

...it may have been true that girls' concerns revolved around issues of intimacy and boys' around autonomy. But it is time that we reconsidered this proposition: women's roles have changed and so, probably, have the psychological concerns and capabilities of adolescent girls. (p. 849)

Indeed, Steinberg and Silverberg (1986) pointed out that different autonomy issues are salient at different times according to gender. Markstrom-Adams (1989) furthered the point by stating that "it is unrealistic to assume that sex role orientations are so pervasive as to be related to all aspects of psychosocial well-being" (p. 339). Still, in general, gender comparisons most often find no differences in autonomy, or differences with boys scoring higher (Markstrom-Adams, 1989).

Further construct validity of the EA was determined through cross-measure comparisons to several related measures such as Berndt's Resistance to Peer Pressure measure, and the Self-Reliance Subscale of the Psychosocial Maturity Inventory (Steinberg & Silverberg, 1986). Many of the relationships between measures were negligible. For example, girls' feelings of autonomy were directly related to self-reliance. There was no such relationship for boys. Age
also intervened heavily; the more an early adolescent reports autonomy from parents the less he or she is likely to report feelings of self-reliance, and is least able to resist peer pressure. This is consistent with the Eriksonian perspective that excessive levels (positive or negative) of autonomy are less favorable to development than are balanced levels.

**Initiative/Guilt Subscales of the Ego Stage Development Inventory**

Because no specific measure has been developed which taps equivalent Eriksonian notions of initiative, it is necessary to use a subscale from a general psychosocial measure. Like the EPSI, the Ego Stage Development Inventory (ESDI) (Caillet, 1980) was designed to address both syntonic and dystonic aspects of Erikson's first six stages of development. Therefore, both the Initiative and the Guilt subscales will be employed in this study.

Methodological procedures taken in the development of the ESDI Initiative/Guilt subscale (see Caillet & Michael, 1983) are:

1. Operational definitions were created for Eriksonian stage three constructs—initiative and guilt.

2. An instrument was designed to tap personal perceptions across a universe of items of stage three development.

3. Eighteen items representing initiative resolution and 18 items representing guilt resolution were created from the operational definitions.
4. The 36 stage three items were submitted to two judges for the verification of content validity. Both judges had to agree that an item represented both the initiative stage and the syntonic/dystonic valence to which it applied. Additionally, both judges had to agree that the item was not written ambiguously.

5. Initiative/guilt questions (along with questions pertaining to each of Erikson's first six psychosocial stages) were presented to 22 high school students of various reading levels. Any item identified as ambiguous by two or more students was eliminated.

6. Remaining initiative/guilt items were tested using 74 undergraduate students of California State University, Long Beach. Based on extensive item and factor analysis, 12 initiative and 12 guilt items were retained in the final version of the measure. The Initiative/Guilt subscale of the ESDI appears to be an adequate measure of initiative for the purposes of this study.

The Self-Efficacy Scale

Although Kowaz and Marcia (1991) have recently developed an industry instrument for children, no specific industry measure exists which is applicable to an adolescent or college-age sample. Without a specifically analogous measure, one must be selected which corresponds as closely as possible to Eriksonian notions of the industry versus inferiority stage. Industry, according to Erikson (1968), is a sense of being useful, "...a sense of being able to make
things and make them well and even perfectly...” (p. 123). To have industry is to have a sense of competent mastery and ability to persevere (Erikson, 1982). Industry involves doing things well beside and with others and becomes the basis for cooperative participation (Erikson et al., 1986). It is a balanced tendency toward industriousness and accomplishment over inferiority and ineptness.

Kowaz and Marcia (1991) have noted that Bandura's concept of self-efficacy bears resemblance to the concept of industry. Self-efficacy is a person's belief that he/she can successfully perform a given task or behavior. Bandura (1977) refers to this quality as personal mastery or personal competence. Furthermore, self-efficacy determines the degree of effort performed on a task and the level of “persistence in the face of adversity” (Sherer et al., 1982, p. 663). Therefore, it seems reasonable that self-efficacy may be conceptually related to Eriksonian notions of industry.

The Self-Efficacy Scale (SE) (Sherer et al., 1982) was developed to measure such attributes in college-age individuals. The original reliability/validity testing was conducted on a sample of 674 college undergraduate students. Factor analysis resulted in the SE loading 23 Likert scale items on two factors: general self-efficacy and social self-efficacy, and yielded Cronbach alpha reliability coefficients of .86 and .71, respectively.

To assess construct validity, the SE was correlated with seven related personality instruments. All predicted correlations were
moderate and in the appropriate direction—the highest with a general measure of interpersonal competency (r = .45). This is of particular interest because the interpersonal competency scale is a measure of psychological adjustment regarding personal effectiveness and ability to deal with others—traits highly related to Erikson’s notion of industry. For these reasons, the Self-Efficacy Scale appears to be an appropriate industry stage measure.

Data Collection and Sampling

Inasmuch as only 70% of a sample may not be categorized in an identity status on the EOM-EIS-2, a relatively large sample size of 414 was collected to ensure at least 25 subjects in each identity status. The EOM-EIS-2, EPSI, and separate stage measures were offered (randomly mixed, with no filler questions) to approximately 500 university students in introductory psychology courses at Utah State University during Winter Quarter 1992.

Of 414 respondents 92% were Caucasian and between the ages 18-24 (36% age 19). Sixty-two percent of the respondents were female; 38% were male. Fifty-six percent reported themselves as freshmen, 24% as sophomores, and 15% as juniors. Eighty-six percent were single or never married; 11% were currently married. Because the measures purport to tap universal identity, personality or psychosocial traits, other demographic and SES type factors were not collected. The analysis included only those respondents between the
age of 18-24, totalling 387 subjects; this was further reduced to only those categorizeable into an identity status (n= 129).

All survey items were presented on a 1-6 Likert scale. Overall, the subjects comprised a rather homogenous group—a factor which should increase internal validity of the findings, albeit while jeopardizing external validity.

The readability level of each measure was examined according to the Lix scale (Anderson, 1983)—1 = first grade to 13 = college level:

<table>
<thead>
<tr>
<th>Measure</th>
<th>Readability Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOM-EIS-II</td>
<td>6</td>
</tr>
<tr>
<td>EPSI</td>
<td>3</td>
</tr>
<tr>
<td>Rotter Trust</td>
<td>6</td>
</tr>
<tr>
<td>Steinberg Autonomy</td>
<td>5</td>
</tr>
<tr>
<td>Caillet ESDI</td>
<td>5</td>
</tr>
<tr>
<td>Sherer Self-Efficacy</td>
<td>4</td>
</tr>
</tbody>
</table>

These readability levels appear appropriate to a low-stress environment important to psychologically oriented, self-report assessment. Because data were collected anonymously and unobtrusively, no ethical or harmful implications were expected.

Analysis

Following data collection, identity statuses and psychosocial levels were generated. Respondents whose scores fit, by definition, into an identity status constituted the sample for this study (n=130). Due to the theoretical assumption that appropriate resolution of previous Eriksonian psychosocial stages is a prerequisite to (and, hence, predictor of) healthy ego identity development, psychosocial measures (e.g., trust, autonomy, initiative, industry) are construed as independent variables with identity status as the dependent variable.
Furthermore, because the independent variables provide interval data and the dependent measure provides categorical data, the most appropriate statistical procedure is discriminant analysis. Discriminant analysis is a procedure for identifying relationships between quantitative predictor variables and qualitative criterion variables (Kachigan, 1982). In this case, the EPSI and specific stage measures were used to establish the relationships between psychosocial stages and identity status. Additionally, the discriminant analysis served to clarify the boundaries between identity statuses.

Specifically, by using the separate measures and EPSI subscale scores as the predictor (independent) variables, discriminant analysis was performed to examine psychosocial differences between each of the identity statuses (e.g., achieved versus moratorium, achieved versus foreclosed, etc.)—totalling six separate research hypotheses. Finally, discriminant analysis was performed to examine psychosocial differences between the identity statuses collectively. These relationships serve to empirically clarify the theoretical connections between Marcia's identity status model and Erikson's theory of psychosocial development.
CHAPTER IV
RESULTS OF THE STUDY

This chapter will address (a) reliability and validity estimates generated for each scale/subscale, (b) results from testing the hypotheses, and (c) conclusions of the results.

Reliability and Validity

In order to assess the internal consistencies of each scale/subscale used in this study, estimates of reliability (Cronbach alpha) were established. Reliabilities (Table 5) for the EOM-EIS-2, EPSI, and separate stage scales and subscales were similar to findings reported in previous studies (see Chapter III).

Regarding the internal consistency of the EOM-EIS, reliability estimates ranged from .70 to .87. Subscale reliabilities from 13 previous studies using the EOM-EIS-2 ranged from .30 to .89, with a median alpha of .66 (Adams et al., 1987b). Of interest is the unusually high .73 alpha on the diffusion subscale, which in other studies is frequently nearer .50 to .60.

Estimates of reliability for the EPSI subscales were Trust .71, Autonomy .78, Initiative .72, and Industry .81. In each case, subscale
<table>
<thead>
<tr>
<th>Subscale</th>
<th>Items</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Alpha</th>
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</thead>
<tbody>
<tr>
<td>Achieved</td>
<td>16</td>
<td>69.8</td>
<td>9.4</td>
<td>.70</td>
</tr>
<tr>
<td>Moratorium</td>
<td>16</td>
<td>48.8</td>
<td>10.0</td>
<td>.75</td>
</tr>
<tr>
<td>Foreclosed</td>
<td>16</td>
<td>41.2</td>
<td>12.8</td>
<td>.87</td>
</tr>
<tr>
<td>Diffused</td>
<td>16</td>
<td>41.9</td>
<td>9.9</td>
<td>.73</td>
</tr>
</tbody>
</table>

**EPSI Subscale Reliabilities**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Items</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Alpha</th>
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<td>Trust</td>
<td>12</td>
<td>49.3</td>
<td>7.5</td>
<td>.71</td>
</tr>
<tr>
<td>Autonomy</td>
<td>12</td>
<td>54.9</td>
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<td>.78</td>
</tr>
<tr>
<td>Initiative</td>
<td>12</td>
<td>52.7</td>
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<tr>
<td>Industry</td>
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<td>54.1</td>
<td>8.0</td>
<td>.81</td>
</tr>
</tbody>
</table>

**Separate Stage Measure Scale Reliabilities**

<table>
<thead>
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<th>Subscale</th>
<th>Items</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust (Rotter)</td>
<td>25</td>
<td>79.0</td>
<td>11.2</td>
<td>.75</td>
</tr>
<tr>
<td>Autonomy (Steinberg)</td>
<td>20</td>
<td>73.0</td>
<td>12.7</td>
<td>.82</td>
</tr>
<tr>
<td>Initiative (Caillet)</td>
<td>12</td>
<td>51.0</td>
<td>8.4</td>
<td>.83</td>
</tr>
<tr>
<td>Low Guilt (Caillet)</td>
<td>12</td>
<td>48.2</td>
<td>9.1</td>
<td>.80</td>
</tr>
<tr>
<td>Industry (Sherer)</td>
<td>23</td>
<td>96.8</td>
<td>8.0</td>
<td>.89</td>
</tr>
</tbody>
</table>
reliabilities were higher than those reported in the original study (.63, .62, .57, and .75, respectively; Rosenthal et al., 1981).

The reliability estimate of the Rotter Interpersonal Trust Scale study of .71 is comparable to previous findings. Previous studies estimated split-half reliability at .76 and test-retest reliability, across an average of 3 months, at .68 (Hochreich & Rotter, 1970).

The Emotional Autonomy Scale reliability estimate from this sample was .82. The Cronbach alpha determined in the original study was slightly lower at .75 (Steinberg & Silverberg, 1986).

Caillet and Michael (1983) reported original subscale estimates of reliability of the Ego Stage Development Inventory ranging from .68 to .90. The estimates of reliability for the Initiative and Guilt subscales for this study of .83 and .80, respectively, fall within that range.

The reliability estimate of the Self-Efficacy Scale in this study was .89. This estimate is greater than the .79 alpha determined in the original study (Sherer et al., 1982).

The reliability estimates of the EOM-EIS and EPSI subscales and of the separate stage measures—all being equal to or greater than estimates of previous studies—indicate that the measures have a favorable degree of internal consistency. Furthermore, all reliability estimates were well over the .60 alpha level recommended by Nunnally (1978) for scales to be used in basic psychometric research. For these reasons, selected measures appear to be adequate for use in this study.
In order to determine discriminant/convergent relations among the scales and construct validity of the subscales, Pearson correlation coefficients were generated for the EOM-EIS-2 and EPSI subscales and for each of the separate measures (Table 6). Of particular interest is the degree of shared variability within similar measures. Regarding the EOM-EIS-2 subscales (a) the achieved and foreclosure scales showed a modest positive correlation (.15), (b) the achieved and moratorium scales exhibited a modest negative correlation (-.11), (c) the achieved and diffused scales were negatively correlated (-.29), and (d) the moratorium and diffusion scales had a moderate positive correlation (4.49). These correlations are consistent with results from previous studies (Adams et al., 1987b).

Pearson correlations of the EPSI subscales (Trust, Autonomy, Initiative, and Industry) ranged from .60 to .75, indicating a moderately high relationship between subscales. The degree of shared variance (r^2), therefore, ranged from .36 (Trust with Initiative) to .56 (Autonomy with Initiative). While it is theoretically relevant that the EPSI subscales are positively correlated, Pearson correlations confirm the expectation that a significant degree of variance in each subscale may be shared. This adds credence to Caillet’s and Michael’s (1983) assertion that some Eriksonian measures tend to tap global, rather than stage specific, aspects of psychosocial development. This justifies the deployment of separate measures for each stage in this study.
Table 6

Scale/Subscale Correlation Coefficients

<table>
<thead>
<tr>
<th>Achieved</th>
<th>Moratorium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moratorium</td>
<td>-.11</td>
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<tr>
<td>Foreclosed</td>
<td>.15</td>
</tr>
<tr>
<td>Diffused</td>
<td>-.29</td>
</tr>
<tr>
<td>Trust</td>
<td>.02</td>
</tr>
<tr>
<td>Autonomy</td>
<td>-.16</td>
</tr>
<tr>
<td>Detachment</td>
<td>-.15</td>
</tr>
<tr>
<td>Independence</td>
<td>-.12</td>
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<tr>
<td>Initiative</td>
<td>.37</td>
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<tr>
<td>Low Guilt</td>
<td>.14</td>
</tr>
<tr>
<td>Industry</td>
<td>.20</td>
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<tr>
<td>EPSI Trust</td>
<td>.25</td>
</tr>
<tr>
<td>EPSI Autonomy</td>
<td>.26</td>
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<tr>
<td>EPSI Initiative</td>
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<td>.00</td>
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</table>

If \( r = .10, .11, \) or .12, then \( p < .05. \)

If \( r > .12, \) then \( p < .01. \)
The Interpersonal Trust Scale (Rotter, 1967) correlated in the expected direction with every scale/subscale. Appropriately, the highest Interpersonal Trust correlation (.32) was with the EPSI Trust subscale. Still, the 90% uniqueness ($r^2 = .10$) between the two scales insures that a greater measurement domain will be tapped. The next highest Interpersonal Trust correlation was with the Emotional Autonomy Scale (-.20). The modest positive correlation (.12) of the Trust measure to the EPSI Autonomy subscale places the EPSI and Emotional Autonomy measures potentially at odds with each other.

The Emotional Autonomy (EA) measure had a negative correlation (-.16) with the EPSI Autonomy subscale. Additionally, the EA scale correlated negatively (-.06 to -.27) with all other EPSI subscales and separate stage measures. The small amount of shared variance ($r^2 = .0001$ to .08) between the EPSI and separate stage measures indicates the possibility that the EA is measuring a somewhat different form(s) of autonomy. Regarding this variation, Ryan and Lynch (1989) stated that:

Our major concern...is not with the measure of EA per se, but its interpretation as a form of autonomy. Neither the evidence presented here nor that presented by Steinberg and Silverberg supports the premise that EA is a marker of self-regulation or self-reliance. Instead, it appears that EA is most meaningfully construed as emotional detachment...

Viewed as a measure of detachment, however, the EA measure helps illuminate significant issues in the area of adolescent development. (p. 354)

Ryan and Lynch (1989) suggested that certain types of autonomy may be developmentally appropriate and others inappropriate. For
example, adolescents who are autonomously detached from parents and others may develop a more negative self-view.

Somewhat ameliorating the discrepancy between the EA and the EPSI Autonomy subscale, the EA scale/subscales correlated positively with moratorium and diffusion scores and negatively with the achievement and foreclosure scores, supporting, conceptually, the appropriate direction of the EA measure. In that Erikson’s theory presumes balance and avoidance of extremes, the EA scale may, in part, measure extreme autonomy—that which approaches the notion of shameless willfulness.

A factor analysis of the EA and the EPSI Autonomy subscale identified three factors (Appendix G). All EPSI Autonomy items (and no EA items) loaded on one factor. The other two factors consisted of all of the EA items. When correlated to the other measures, one factor (titled Detachment) had broader and more pronounced negative correlations to the EPSI and separate stage measures than the EA as a whole. Detachment appears to be a type of unhealthy autonomy or alienation. The other factor (titled Independence) appears to assess a somewhat less negative component of autonomy as correlations with the other psychosocial measures are mixed. In order to address these differing dimensions of autonomy, the EA and its two factor-generated subscales (viz., Detachment & Independence) were used with the EPSI Autonomy subscale in the discriminant analysis.
The Initiative and Guilt subscales of the Ego Stage Development Inventory correlated moderately (.51 & .61, respectively) with the EPSI Initiative subscale. They also correlated positively (.07 to .68) with the remaining scales/subscales—Emotional Autonomy scale/subscales excepted. The same pattern of correlations (.16 to .70) was found for the separate measure of Industry (Self-Efficacy Scale). The Industry measure correlation to the EPSI Industry was .69, indicating a uniqueness of nearly 50%.

Overall, discriminant/convergent relations support the use of the measures in this study. The one unexpected result was the broadly negative—but modest—correlations of the Emotional Autonomy Scale. The overall degree of shared variability among scales/subscales in this study was relatively small. It is therefore expected that the measures tap generally corresponding, yet sufficiently unique, domains to be valid measures of adolescent psychosocial development.

Testing of the Hypotheses

The purpose of this study was to examine the relationship between Marcia's ego identity status model and Erikson's psychosocial theory. Choosing the appropriate statistical tool for the study required taking into consideration the notion that identity development is presumed to be dependent upon the development of previous psychosocial stages—hence identity status was the dependent variable and psychosocial stages were the independent variables. Statistical
comparison of categorical dependent variables with continuous independent variables requires the use of discriminant analysis.

Null hypothesis 1. The achieved status will not differ from moratorium status on measures of trust, autonomy, initiative, and industry. Discriminant analysis was performed to compare psychosocial differences of the achieved and moratorium respondents. Results showed that persons in the achieved status differed from moratorium status respondents on measures related to all of the first four psychosocial stages (Table 7).

Table 7

Discriminant Analysis Summary Table: Achieved with Moratorium

<table>
<thead>
<tr>
<th>Scale/Subscale</th>
<th>Achieved Mean</th>
<th>Std. Dev.</th>
<th>Moratorium Mean</th>
<th>Std. Dev.</th>
<th>Wilks' Lambda</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSI Trust</td>
<td>53.58</td>
<td>5.75</td>
<td>45.85</td>
<td>6.51</td>
<td>.72</td>
<td>.00</td>
</tr>
<tr>
<td>Detachment</td>
<td>31.88</td>
<td>7.90</td>
<td>38.58</td>
<td>7.00</td>
<td>.67</td>
<td>.00</td>
</tr>
<tr>
<td>Low Guilt</td>
<td>52.14</td>
<td>8.34</td>
<td>45.12</td>
<td>7.62</td>
<td>.64</td>
<td>.00</td>
</tr>
<tr>
<td>Industry</td>
<td>103.37</td>
<td>11.13</td>
<td>96.35</td>
<td>16.01</td>
<td>.62</td>
<td>.00</td>
</tr>
<tr>
<td>Initiative</td>
<td>53.98</td>
<td>6.74</td>
<td>49.88</td>
<td>6.91</td>
<td>.60</td>
<td>.00</td>
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<tr>
<td>EPSI Industry</td>
<td>57.33</td>
<td>6.56</td>
<td>52.54</td>
<td>7.70</td>
<td>.58</td>
<td>.00</td>
</tr>
</tbody>
</table>

Group Centroids:  Achieved 0.66  Moratorium -1.09

Number of cases by group
Achieved 43  Moratorium 26  Total 69

Canonical corr. = .65  Chi Square = 35.61  Sig. level .000  Lambda = .57
Achieved respondents report 18.10% higher levels on the EPSI Trust subscale than moratoriums. Moratoriums reported 17.36% higher levels on the EA Detachment subscale (related to negative psychosocial development) than achieved. Achieved respondents reported 13.46% higher levels on the Low Guilt subscale. The achieved reported 6.79% higher levels on the Industry measure, 7.67% higher on the Initiative measure, and 8.42% higher levels on the EPSI Industry subscale than the moratoriums.

The resulting function accounted for 42.23% of the variability, and a classification accuracy of 84.06%. Overall, the achieved identity status was related to higher levels than the moratorium status on all of the first four Eriksonian stages of psychosocial development. The null hypothesis was therefore rejected.

**Hypothesis 2.** The achieved status will not differ from foreclosed status on measures of trust, autonomy, initiative, and industry. Discriminant analysis found two predominant psychosocial differences among the achieved and foreclosed respondents (Table 8).

Achieved respondents reported 11.29% higher levels on the EA Independence subscale, while foreclosed respondents reported 7.27% lower levels on the Industry scale. However, because of the moderate canonical correlation (.50, accounting for only 25% of the variability) and because of the relative accuracy (65.82%) in classifying achieved versus foreclosed respondents, the extent of the differences between the two statuses is not as clearly evident as those between
Table 8

Discriminant Analysis Summary Table: Achieved with Foreclosed

<table>
<thead>
<tr>
<th>Scale/Subscale</th>
<th>Achieved Mean</th>
<th>Std. Dev.</th>
<th>Foreclosed Mean</th>
<th>Std. Dev.</th>
<th>Wilks’ Lambda</th>
<th>Sig.</th>
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<tbody>
<tr>
<td>Independence</td>
<td>43.72</td>
<td>6.64</td>
<td>38.83</td>
<td>5.51</td>
<td>.86</td>
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<td>Industry</td>
<td>103.37</td>
<td>11.13</td>
<td>95.86</td>
<td>13.27</td>
<td>.80</td>
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<td>Autonomy</td>
<td>71.23</td>
<td>12.01</td>
<td>68.31</td>
<td>7.88</td>
<td>.77</td>
<td>.00</td>
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<tr>
<td>Initiative</td>
<td>53.98</td>
<td>6.74</td>
<td>50.31</td>
<td>8.22</td>
<td>.76</td>
<td>.00</td>
</tr>
<tr>
<td>EPSI Trust</td>
<td>53.59</td>
<td>5.75</td>
<td>49.67</td>
<td>7.77</td>
<td>.76</td>
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</table>

Group Centroids: Achieved 0.51 | Foreclosed -0.61

Number of cases per group
- Achieved 43
- Foreclosed 36
- Total 79

Canonical Corr. = .50
Chi Square = 21.08
Sig. Level = .000
Lambda = .76

other statuses (e.g., achieved versus moratorium, achieved versus diffused), and resulted in the rejection of the null hypothesis.

Hypothesis 3. The achieved status will not differ from diffused status on measures of trust, autonomy, initiative, and industry.

Discriminant analysis found numerous, broad psychosocial differences between achieved and diffused persons (Table 9), thereby rejecting the null hypothesis.

The function produced in the analysis accounts for over half of the variability between the statuses ($r^2 = .56$) and an overall Lambda of .43. This results in an impressive classification accuracy of 91.04%.

The most significant psychosocial difference between achieved
Table 9

Discriminant Analysis Summary Table: Achieved with Diffused

<table>
<thead>
<tr>
<th>Scale/Subscale</th>
<th>Achieved Mean</th>
<th>Achieved Std. Dev.</th>
<th>Diffused Mean</th>
<th>Diffused Std. Dev.</th>
<th>Wilks' Lambda</th>
<th>Sig.</th>
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<tr>
<td>Initiative</td>
<td>53.98</td>
<td>6.74</td>
<td>41.88</td>
<td>7.07</td>
<td>.58</td>
<td>.00</td>
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<td>EPSI Trust</td>
<td>53.59</td>
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<td>45.67</td>
<td>7.91</td>
<td>.50</td>
<td>.00</td>
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<td>Detachment</td>
<td>31.88</td>
<td>7.90</td>
<td>36.46</td>
<td>5.93</td>
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<td>.00</td>
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<td>EPSI Autonomy</td>
<td>54.91</td>
<td>6.52</td>
<td>45.38</td>
<td>7.87</td>
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<td>Trust</td>
<td>80.51</td>
<td>9.90</td>
<td>74.63</td>
<td>10.52</td>
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<td>Low Guilt</td>
<td>52.14</td>
<td>8.34</td>
<td>44.63</td>
<td>8.40</td>
<td>.43</td>
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Group Centroids: Achieved .84 Diffused -1.51

Number of cases per group
- Achieved: 43
- Diffused: 24
- Total: 67

Canonical Corr. = .75
Chi Square = 52.22
Sig. Level = .000
Lambda = .43

and diffused respondents was on the Initiative scale (Lambda = .58), with achieved respondents reporting levels 22.41% higher. The achieved also scored 14.73% higher on EPSI Trust and 7.36% higher on the Trust scale. Diffused persons, on the other hand, reported 14.42% higher levels on the Guilt subscale, and 12.59% higher levels of EA Detachment subscale.

**Hypothesis 4.** The moratorium status will not differ from foreclosed status on measures of trust, autonomy, initiative, and industry. The discriminant function created from the analysis showed, as expected, that moratoriums reported significantly higher levels
(11.50%) on the Emotional Autonomy Scale (being higher on both the Detachment and Independence subscales) than foreclosed respondents (Table 10). Foreclosed persons scored slightly (3.84%) higher than moratoriums on the EPSI Initiative subscale, as well as on both the EPSI Trust subscale and Trust measure, 8.27% and 7.85%, respectively. This discriminant function accounts for 30.26% of the variance between the two statuses, and produces a 72.58% classification accuracy. Although differences in initiative and trust may be relevant, the primary psychosocial difference between moratorium and foreclosed respondents appeared in various aspects of autonomy.

Based on the findings, the null hypothesis was rejected.

Table 10

Discriminant Analysis Summary Table: Moratorium with Foreclosed

<table>
<thead>
<tr>
<th>Scale/Subscale</th>
<th>Moratorium</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Foreclosed</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Wilks' Lambda</th>
<th>Sig.</th>
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<td>Autonomy</td>
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<td>12.17</td>
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<td>68.31</td>
<td>7.88</td>
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<td>.83</td>
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</tr>
<tr>
<td>EPSI Trust</td>
<td>45.85</td>
<td>6.51</td>
<td></td>
<td>49.67</td>
<td>7.77</td>
<td></td>
<td>.77</td>
<td>.00</td>
</tr>
<tr>
<td>EPSI Autonomy</td>
<td>49.58</td>
<td>6.91</td>
<td></td>
<td>50.33</td>
<td>7.78</td>
<td></td>
<td>.76</td>
<td>.00</td>
</tr>
<tr>
<td>EPSI Initiative</td>
<td>51.15</td>
<td>7.99</td>
<td></td>
<td>53.11</td>
<td>5.76</td>
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<td>.72</td>
<td>.00</td>
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<tr>
<td>Trust</td>
<td>73.38</td>
<td>11.01</td>
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<td>79.56</td>
<td>10.49</td>
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<td>.69</td>
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</tbody>
</table>

Group Centroids: Moratorium .77 Foreclosed -0.56

Number of cases per group

| Moratorium | 26 |
| Foreclosed | 36 |
| Total      | 62 |

Canonical Corr. = .55
Chi Square = 21.00
Sig. Level = .000
Lambda = .69
Hypothesis 5. The moratorium status will not differ from diffused status on measures of trust, autonomy, initiative, and industry. The major difference between moratorium and diffused respondents was that moratoriums reported 16.04% higher levels on the Initiative measure (Table 11). Diffused persons reported 8.57% higher levels on the EPSI Autonomy subscale than moratoriums.

The amount of variability between the two statuses explained by the discriminant function is 38.44%, with a classification accuracy of 76.00%. In general, while issues of autonomy are notable, the moratorium status differs most from the diffused status on the fourth Eriksonian stage—initiative. Therefore, the null hypothesis is rejected.

Table 11

**Discriminant Analysis Summary Table: Moratorium with Diffused**

<table>
<thead>
<tr>
<th>Scale/Subscale</th>
<th>Moratorium Mean</th>
<th>Std. Dev.</th>
<th>Diffused Mean</th>
<th>Std. Dev.</th>
<th>Wilks' Lambda</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiative</td>
<td>49.88</td>
<td>6.91</td>
<td>41.88</td>
<td>7.07</td>
<td>.75</td>
<td>.00</td>
</tr>
<tr>
<td>Low Guilt</td>
<td>45.12</td>
<td>7.62</td>
<td>44.63</td>
<td>8.40</td>
<td>.69</td>
<td>.00</td>
</tr>
<tr>
<td>EPSI Autonomy</td>
<td>49.58</td>
<td>8.21</td>
<td>45.38</td>
<td>7.88</td>
<td>.65</td>
<td>.00</td>
</tr>
<tr>
<td>Independence</td>
<td>43.50</td>
<td>7.60</td>
<td>45.25</td>
<td>7.50</td>
<td>.63</td>
<td>.00</td>
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</table>

Group Centroids: Moratorium 0.73 Diffused -0.79

Number of cases per group
- Moratorium 26
- Diffused 24
- Total 50

Canonical Corr. = .62
Chi Square = 21.60
Sig. Level = .000
Lambda = .63
Hypothesis 6. The foreclosed status will not differ from the diffused status on measures of trust, autonomy, initiative, and industry. Two significant differences constitute the discriminant function of the analysis (Table 12).

Foreclosed persons reported 16.82% higher levels on the Initiative measure. Diffused persons reported higher levels (11.66%) on the Emotional Autonomy scale. Classification accuracy was 80.00%, and the canonical correlation accounted for 42.33% of the variability. The findings result in rejection of the null hypothesis.

Table 12

<table>
<thead>
<tr>
<th>Scale/Subscale</th>
<th>Foreclosed Mean</th>
<th>Std. Dev.</th>
<th>Diffused Mean</th>
<th>Std. Dev.</th>
<th>Wilks' Lambda</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiative</td>
<td>50.31</td>
<td>8.22</td>
<td>41.88</td>
<td>7.07</td>
<td>.77</td>
<td>.00</td>
</tr>
<tr>
<td>Autonomy</td>
<td>68.31</td>
<td>7.88</td>
<td>77.25</td>
<td>9.79</td>
<td>.65</td>
<td>.00</td>
</tr>
</tbody>
</table>

Group Centroids: Foreclosed .59 Diffused -0.89
Canonical Corr. = .65
Chi Square = 24.92
Sig. Level = .000
Lambda = .65
Conclusions

In summary, analyses illustrate numerous, specific, significant differences between Marcia's identity statuses and Erikson's first four psychosocial stages. Each of the six null hypotheses (that there were no differences between identity statuses) was rejected. In general, the identity status with the highest levels of EPSI Trust, EPSI Autonomy, EPSI Initiative, and EPSI Industry was the achieved status—followed by the foreclosed, moratorium, and diffusion statuses, respectively (Appendix H). This pattern also held true for the separate measures of trust, initiative, and industry—excepting that moratoriums scored slightly higher than foreclosed respondents on the measure of industry.

The view of the Emotional Autonomy scale, particularly the Detachment subscale, as a form of unhealthy psychosocial development was substantiated. Interpretation of the domain addressed by the (subjectively titled) Independence subscale was less clear. Because of the lack of conceptual clarity, the relationship of the Independence subscale to either identity status or psychosocial development is of limited utility.

Otherwise, the results generally provide quantitative evidence that Marcia's model of ego identity development is related in a variety of ways to Erikson's first four psychosocial stages. The implications of those relationships are discussed in the following chapter.
CHAPTER V
SUMMARY, DISCUSSION, LIMITATIONS,
AND RECOMMENDATIONS

This concluding chapter provides (a) a general summary of the study, (b) discussion, (c) limitations, and (d) recommendations for future research.

Summary of the Study

The concept of identity has been a focal point of human inquiry since antiquity. In the 20th century, theorists identified adolescence as a time vital to identity development. Erikson's psychosocial framework has become a predominant means to explain identity development throughout the lifespan. In recent years, Marcia's ego identity status paradigm was developed as a means to verify Erikson's fifth psychosocial stage—identity versus role confusion (Marcia, 1966). Centering on notions of personal exploration and commitment, Marcia's paradigm has become a popular research method to quantitatively assess a variety of issues related to adolescent identity development (Bourne, 1978a).

While the identity status paradigm has become the basis for nearly 200 studies on adolescent development, concerns have arisen which question the paradigm's adequacy. Cote and Levine (1988a)
have asserted that Marcia's model is too narrow in scope, limited in
definition, and too rigid to address all (or most) of Erikson's notions of
identity development. Researchers and theorists have called for
further research to verify and clarify differences and similarities of the
two theories (see Adams, 1992). The purpose of this study was to
assess the relationship between Marcia's identity status paradigm and
Erikson's psychosocial theory.

A basic assumption of this study was that for the identity status
model to be a valid representation of Erikson's fifth psychosocial
stage, it must be consistent with the preceding four psychosocial
stages (viz., trust, autonomy, initiative, and industry). Therefore,
identity statuses were compared to measures of trust, autonomy,
initiative, and industry.

The research questions used to test the research question were
that:

1. The achieved status will not differ from the moratorium status
on measures of trust, autonomy, initiative, and industry.

2. The achieved status will not differ from the foreclosed status
on measures of trust, autonomy, initiative, and industry.

3. The achieved status will not differ from the diffused status on
measures of trust, autonomy, initiative, and industry.

4. The moratorium status will not differ from the foreclosed
status on measures of trust, autonomy, initiative, and industry.
5. The moratorium status will not differ from the diffused status on measures of trust, autonomy, initiative, and industry.

6. The foreclosed status will not differ from the diffused status on measures of trust, autonomy, initiative, and industry.

Six self-report instruments were employed in this study. The Extended Objective Measure of Ego Identity Status II (Bennion & Adams, 1986) was used as a basis to measure the dependent variable—identity status. The Eriksonian Psychosocial Stage Inventory (Rosenthal et al., 1981) was used to measure each of the first four psychosocial stages. Additionally, separate instruments were employed to further measure aspects of trust (Interpersonal Trust Scale; Rotter, 1967), autonomy (Emotional Autonomy Scale; Steinberg & Silverberg, 1986), initiative (Initiative/Guilt subscales of Ego Stage Development Inventory; Caillet, 1980), and industry (Self-Efficacy Scale; Sherer et al., 1982). The resulting survey consisted of 204 items.

Nearly 500 students from two Utah State University introductory psychology classes were given the opportunity (outside of class time, for extra credit) to respond to the survey. Of these, 414 students participated in the study. Respondents between the ages of 18 and 24 were used in the analysis, numbering 387. Respondents were predominantly freshmen, white, and unmarried; 62% were female, 38% male.

Reliability estimates of the measures, ranging from .70 to .89, showed favorable internal consistencies for each measure. Pearson
correlations were moderate and positive for all measures except the Emotional Autonomy Scale, which was generally negatively correlated with the other measures. Therefore, a factor analysis was performed on the items in the Emotional Autonomy Scale and the EPSI Autonomy subscale. Three factors were identified and used as separate scales in the analysis.

The Jones et al. (1993) 1/2 standard deviation method was used to assign respondents to identity statuses—a sample totalling 129. Six discriminant analyses were performed (e.g., achieved with moratorium, achieved with foreclosed, etc.) with all psychosocial scales/subscales to determine specific psychosocial differences between statuses.

A general pattern was found in this sample that the highest levels of psychosocial trust, autonomy, initiative, and industry were reported by the achieved respondents, followed by the foreclosed, moratoriums, and diffused, respectively. More importantly, discriminant analysis identified significant psychosocial differences between statuses.

The achieved respondents reported higher levels of trust, autonomy, initiative, and industry than moratoriums; significantly higher levels of autonomy and industry than the foreclosed; and significantly higher levels of trust and initiative, and significantly lower levels of guilt when compared to diffused respondents. Moratoriums reported significantly higher levels of emotional autonomy and
significantly lower levels of trust and initiative than foreclosed respondents. Moratoriums did report significantly higher initiative and lower guilt than the diffused. Foreclosed respondents reported significantly higher initiative and lower autonomy than diffused persons.

These results provide significant—albeit initial—quantitative evidence that Marcia's ego identity status paradigm corresponds both specifically and broadly to Eriksonian psychosocial theory.

Discussion of the study

Having established that Marcia's identity status paradigm is related to Erikson's portrayal of identity development, an interpretation of the findings, subtleties, and incongruities of the study is needed.

The most compelling finding of this study was the confirmation that the achieved status was related to the highest levels of psychosocial adjustment on nearly every scale/subscale used in the study. This is consistent with the Owen (1984) study which found that achieved individuals scored highest on a general measure of psychological development. Previous studies found identity-achieved individuals to be less worried (Adams et al., 1985) and have lower levels of self-consciousness (Adams et al., 1987a) than individuals in other statuses. These findings are supported by the results of this study in that achieved persons reported significantly lower levels of
guilt than other respondents. Achieved persons have been found to be most content with working either alone or with others (Kroger, 1990). This is conceptually related to the findings of this study in that achieved persons had significantly higher levels of initiative and industry than other respondents. Previous studies also typically found persons in the achieved status to be generally superior in numerous other developmental domains (e.g., cognitive, academic, moral, and social) (see Adams et al., 1987b; Bourne, 1978a). Overall, these correlates are consistent with Marcia's portrayal that identity-achieved individuals are strong, self-directed, and highly adaptive (Waterman, 1992) and they confirm the broad positive findings regarding the achieved respondents in this study. This suggests that the use of the term "achieved" or "achievement" is not an inappropriate title for such persons. While there is no certainty that achieved persons will remain in this status, it does appear that while there they are likely to achieve both psychosocially and otherwise.

At the other end of the continuum is diffusion. Findings from this study confirm Marcia's (1966) view of the diffused individuals as being least psychosocially adaptive. In contrast to the achieved respondents, psychosocial scores of diffused respondents were lower on every measure in the study. Marcia's characterization of diffusion of apathy and disinterest is related to being "unengaged" in either exploration or commitment (Stephen et al., 1992). This is consistent with the finding of this study that diffused persons reported the
lowest levels of initiative and industry. Diffused persons have typically been found to be more worried (Adams et al., 1985) and have greater levels of self-consciousness (Adams et al., 1987a) than other statuses. These findings are conceptually related to the results of this study that diffused persons report greater levels of guilt than other statuses. Diffused persons have also been found to be withdrawn, least content with working with others, and having fewer close opposite-sex friends (Kroger, 1990). These characteristics are related to and supported by this study's finding that diffused respondents reported significantly lower on the trust measures and higher on the Emotional Detachment scale (a measure of extreme autonomy) than individuals in other statuses. These findings correspond to numerous studies that found diffused persons as being typically least advanced of the four identity statuses (Adams et al., 1987b; Bourne, 1978a).

An area of interest regarding Marcia's theory centers on moratorium and foreclosure statuses. From the inception of Marcia's paradigm, these two statuses were viewed as intermediate between achievement and diffusion (Marcia, 1966). To many, the foreclosure status is viewed on an adaptability continuum developmentally nearer diffusion, and moratorium nearer achievement (e.g., Archer, 1989; Marcia, 1989; Streitmatter, 1993; Waterman, 1982). Previous research has found that moratorium individuals score similar to achieved individuals in many ways. Moratoriums have been found to be comparable to achieved persons on measures regarding cognitive
ability, decision-making (Blustein & Phillips, 1990), and moral
development (Adams et al., 1987b). However, the general findings of
this study suggest moratorium persons may be psychosocially nearer
diffusion than achievement.

In a study of Cuban-Americans, Owen (1984) found that
moratoriums scored lowest of the statuses on a general measure of
psychosocial development. This study found that moratoriums scored
above diffused, but lower than achieved and foreclosed respondents on
all but two scales/subscales (scoring slightly higher than foreclosed on
industry, and lowest on the Emotional Detachment (autonomy)
subscale). Moratoriums have been found to (a) be least willing to be
subordinate to group leaders (Donovan, 1975), (b) score lowest on
measures of authoritarianism (Bennion & Adams, 1986), and (c) be
least likely to be dependent on familiar settings (Kroger, 1990). This
is consistent with this study that moratorium respondents scored
nearer diffusion on measures of trust, autonomy, and initiative.

An interesting paradox arises in the observation that a person
with greater cognitive (Blustein & Phillips, 1990) and moral
development (Adams et al., 1987b) can exhibit lower levels of
psychosocial strength (Owen, 1984). Persons in moratorium are
presumed to be in a crisis period—which assumes an active struggle to
make commitments (Marcia, 1966). Perhaps cognitive or moral
development prompts one to more critically deal with seemingly
unresolvable dilemmas during adolescence—issues which foreclosed or
diffused persons either ignore or do not recognize. Actively “struggling” with such issues may demand a psychosocial price which foreclosed or diffused persons are unwilling or unable to pay. On the other hand, moratoriums may simply lack the personality and social resilience necessary to move forward psychosocially regardless of cognitive or moral quandary. It could also be that social norms reward commitment over exploration to such an extent that moratoriums suffer psychosocial “discomfort” (Marcia, 1989).

Studies have found foreclosed and moratorium persons to differ significantly on issues related to autonomy—with moratoriums typically scoring higher than foreclosed on measures of authoritarianism (Bennion & Adams, 1986). The expected finding that moratoriums would have greater levels of autonomy was not clearly present. Moratorium respondents did score significantly higher on the Emotional Autonomy scale. Moratorium levels on the EA Detachment subscale were even higher (5.57%) than those of diffused respondents.

Because the EA scale/subscales were negatively correlated with the other psychosocial measures used in the study, the EA scale/subscales are interpreted as tapping inappropriate, unhealthy aspects of autonomy. Hence, it appears that foreclosed respondents, with significantly lower EA scores and slightly higher EPSI Autonomy scores, may be characteristic of greater developmentally appropriate autonomy.
Previous findings regarding foreclosure offer a mixed view of the status. Typically, the personality of a foreclosed person is characterized as rigid and closed-minded (Bennion & Adams, 1986), more dependent on others in decision-making activities (Blustein & Phillips, 1990), and often seeking the security of familiar settings (Kroger, 1990). Foreclosed persons are not as likely as moratorium or achieved persons to be analytical or philosophical (Read et al., 1984). This portrayal of foreclosure prompted the expectation of lower levels of autonomy among foreclosed respondents in this study. Such low levels were not found. Indeed, foreclosed persons in this study reported levels on the EPSI Autonomy subscale (associated with healthy psychosocial development) second only to achieved (but only slightly higher than moratorium) respondents. Additionally, foreclosed persons reported the lowest levels on Emotional Autonomy scale (associated with inappropriate psychosocial health).

The interpretation of the foreclosed status may be a matter of one's perspective. Waterman (1992) suggested that foreclosure could be either rigid or steadfast, dogmatic or committed, and conforming or cooperative. Some theorists have begun to argue that foreclosure may provide a potentially beneficial harbor during stressful times (Cote & Levine, 1988a). Waterman (1988) stated that:

> It is...true that identity status theorists and researchers have a value preference for the “examined life” in general and the reflective appraisal of identity alternatives in specific. Yet, I think almost all would agree that there are both appropriate and healthy reasons for remaining
foreclosed with respect to identity goals, values, and beliefs.... (p. 192)

Archer (1989) stated that "given the positive personality and social behavior correlates that have been found to be associated with the foreclosure status... [foreclosure] appears to be working for that individual at that point in time" (p. 354). The more adaptive view of foreclosure is feasible based on the results of this and previous—albeit limited—research. In a study by Owen (1984), foreclosed individuals scored second only to achieved individuals on a general measure of psychosocial development. The same psychosocial standing was found of foreclosed respondents on nearly all measures used in this study—namely, second to achievement. Marcia’s (1989) assertion that when the “dust settled” in late adolescence, moratoriums would demonstrate more sophisticated adaptation than foreclosure was not supported in the results of this study. Until further evidence is found to the contrary, there appears to be limited empirical justification for grouping moratorium with achievement and foreclosure with diffusion, at least as it pertains to psychosocial development.

To some, the issue over which of the two statuses holds the greatest psychosocial advantage is made somewhat immaterial with the rationale that both are necessary parts of an interactive identity formation process. Stephen et. al (1992) associated foreclosure and achievement with the commitment end of a polar continuum of that process, whereas moratorium and diffusion are linked with the exploration end. Perhaps a period of crisis (i.e., moratorium) is
necessary in order for a foreclosed individual to move to identity achievement. Theoretically, such a crisis could contribute to a temporary "lowering" of the levels of one's psychosocial traits. This is analogous to the temporary damage done to a tree when pruned, or to the soreness of muscles following a hard work out and which is concomitant to growth. In this view, neither moratorium (exploration) nor foreclosure (commitment) would be seen as a lower or regressive status, but as requisite components of "ongoing identity revision" (Stephen et. al, 1992).

In addition to evidence of separate psychosocial stage differences between the identity statuses, psychosocial profiles (functions) were built for each status. Once profiles were established, discriminant analysis tested the accuracy of the profile by using it to predict membership in a status. For example, if levels of trust, autonomy, and initiative differ between moratorium and foreclosed statuses, then those differences should be useful in predicting whether a given respondent is either a moratorium or a foreclosed. If the resulting prediction level is low, then the profile is not very helpful in differentiating between the two groups. On the other hand, a high prediction accuracy indicates the profile (function) is more clearly capturing group differences. In this study, the prediction accuracies are impressive (Appendix I).

Taken as a whole, the findings of this study indicate a psychosocial advantage of the achieved status, a psychosocial disparity
of the diffused status, and an empirical separation of the foreclosed and moratorium statuses toward achievement and diffusion, respectively. This study has served to empirically establish a relationship between Marcia’s and Erikson’s theory. The possibility now exists to further the development of both theories by using this link for relative comparisons.

Limitations of the study

A number of issues pertaining to the internal and external validity of the results of this study need to be addressed. The quality of the evidence presented in the study is unavoidably influenced by certain limitations. Sample, design, and measurement-related issues are discussed. Of particular concern, content, convergent, and construct validities pertaining to the instrumentation are addressed.

Limitations Due to the Sample and Design

An initial issue pertaining to the sample is that only about 25% (129 of circa 500) of the persons available to participate in the survey were actually included in the analysis. This is due, in part, to the classification method used on the EOM-EIS-2 (see Jones et al., 1993). It is not known how identity status and psychosocial traits differ among the remaining unclassified majority of the sample. It is feasible that their psychosocial traits can account for differences in identity status. It is possible that such unclassified persons, constituting a majority of the sample, have psychosocial patterns which
systematically differ from those in pure identity statuses. Therefore, the results of this study should not be generalized to adolescent populations not classifiable into a pure identity status.

The sample for this study was quite homogeneous, being almost exclusively white, single, female, college freshmen, and sophomores. Such a sample and cross-sectional design reflects the views of a narrowly selected cohort. These findings, therefore, should not be liberally generalized to other populations. Past and future cohorts would likely differ from this sample as well.

How the same sample would score if measured at any later date is also not known. While foreclosure may be the norm in this society, theorists have posited that the preferred developmental sequence is the MAMA (Moratorium/Achievement/Moratorium/Achievement) cycle (Stephen et al., 1992). It is not known whether a foreclosed person can move into an achieved identity status without passing through moratorium. A one-time measurement design is not able to identify either causation (i.e., whether psychosocial development causes identity development or vice versa) or developmental sequences. Therefore, findings from this study should not be used to infer causal direction.

Limitations Due to Instrumentation

Inevitably, limitations exist which relate to the validity of the measures used in the study. Regarding content validity, it is vital that the identity status measure used in this study adequately captured the
notions of Marcia model, and that the psychosocial measures adequately, but not totally, address Erikson's psychosocial domain. The contention that neither Marcia's paradigm of identity development nor the instruments developed to assess Marcia's paradigm fully or adequately address Erikson's notions of identity development is plentifully voiced (Archer & Waterman, 1990; Bosma, 1992; Cote & Levine, 1987, 1988a, 1988b, 1989; Kroger & Haslett, 1991). Of equal importance to this study, is the concern over the validity of psychosocial measures (Caillet & Michael, 1983; Gray et al., 1986; Logan, 1986).

While Erikson's notion of identity development pertains to resolving commitments via a period of exploration, other essential dimensions include resolving ego versus superego dominance, humanistic versus technological orientation, and an appropriate value orientation (Cote & Levine, 1987). Erikson wrote that this complex interaction involves a person's: constitutional givens, idiosyncratic libidinal needs, favored capacities, significant identifications, effective defenses, successful sublimations, and consistent roles (Erikson, 1968). While it is unlikely that any instrument could tap such a broad domain, many measures, including Marcia's, have been portrayed as being Eriksonian-based. However, no measures exist to date—including those used in this study—which purport to tap all, or perhaps even most, of Erikson's notions on adolescent psychosocial development.
Constructs which have been measured, including trust, autonomy, initiative, guilt, industry, exploration, and commitment, have shown to share a moderate degree of convergent validity. It has been demonstrated that the shared variability between the measures used in this study is just that—moderate, and not high. This served to assure that a broader domain would be addressed than if the measures were highly convergent. The limitation thereby produced is a relative uncertainty regarding the accuracy of each measure to tap the specified trait. For example, it is not known with certainty whether the Eriksonian notion of trust is most accurately reflected in the EPSI Trust Subscale (Rosenthal et al., 1981) or in the Interpersonal Trust Scale (Rotter, 1967). When the scope of a theory has yet to be clearly operationalized, a certain degree of construct validity is necessarily sacrificed in order to insure a broader inclusion of applicable content (Gregory, 1992). However, the presence of theory-consistent findings among measures—as has been found in this study—is an indication in itself of construct validity.

Another limitation of the study is based on the notion of dialecticism or that psychosocial health is enhanced by moderation. Erikson has posited that extremity is psychosocially unhealthy. Yet, dialectic moderation is not simply choosing the middle of all positions. It is to do the right thing, for the right reason, at the right time. A perfect Eriksonian measure would not only require including all the psychodynamic components of his theory, but all of the
social/behavioral possibilities as well. Even then, creating a measure with the ability to determine which behavior or attitude is moderate from that which is extreme is likely outside the current capacity of pencil and paper, self-report psychometrics. This is an acceptable limitation to this (or any other) study as no universe of content is accepted as entirely adequate to define any psychological construct (Cronbach & Meehl, 1955), let alone constructs as complex as Erikson's. In order to be an aid to intervention a measure need only identify psychosocial deficits/strengths, and not necessarily produce a complete psychosocial profile.

The measures used in this study have addressed the scope and breadth of Erikson's theory on identity development in useful but limited ways. This does not negate the results; indeed, the measures have, as a group, served to establish initial relationships between two popular theories.

Recommendations

Based on the findings and the limits thereof, the following recommendations for future research seem warranted:

1. Because it is not known how identity status and psychosocial traits differ among persons not classified into an identity status, the identity status measure should be modified so as to classify all adolescent respondents into one of the four identity statuses.
2. Replicative studies are needed with samples from diverse populations. This includes studies of adolescents who have not come from college, white, and middle class samples—as well as studies which account for differences by gender, socioeconomic status, religiosity, marital status, and so forth.

3. Longitudinal studies are needed to establish the casual direction between psychosocial and identity development. Such studies could more precisely establish if, how, and when psychosocial traits/stages influence identity development and/or interstatus movement—or vice versa. For example, would a change in trust precipitate a shift in identity status? Conversely, would an increase in exploration lead to a change in psychosocial development?

4. Stratified studies with persons of varying ages (childhood through adulthood) are needed to determine how identity issues become more or less relevant in different psychosocial stages—as posited by Erikson et al. (1986). Such research, pertaining to several cohorts, could create a more valid basis to support, expand, limit, or otherwise modify identity theory.

5. Modification of Eriksonian-based identity measures is needed in order to: (a) include a greater proportion of content related to Eriksonian identity theory, (b) improve the construct and convergent validity of Eriksonian measures, and (c) to differentiate moderate from extreme attitudes and behavior in a variety of settings. Such
modifications would help to insure a balance between assessing psychological and contextual issues basic to Eriksonian theory.

The challenge of developing models to measure any aspect of psychosocial development can be formidable. Marcia's identity status paradigm has provided one of the most productive means to date for studying adolescent identity. This study has demonstrated that while not all aspects of psychosocial development have yet to be either fully understood and operationalized, the identity status model tends to be compatible with Eriksonian notions of development.
REFERENCES


APPENDICES
Appendix A:

Extended Object Measure-Ego Identity Status-II
(Bennion & Adams, 1986)
Read each item and indicate to what degree it reflects your own thoughts and feelings. If a statement has more than one part, please indicate your reaction to the statement as a whole. Indicate your answer on the answer sheet by choosing one of the following responses. Do not write on the questionnaire itself.

A = strongly agree  
B = moderately agree  
C = agree  
D = disagree  
E = moderately disagree  
F = strongly disagree

1. I haven't chosen the occupation I really want to get into, and I'm just working at whatever is available until something better comes along.

2. When it comes to religion I just haven't found anything that appeals and I don't really feel the need to look.

3. My ideas about men's and women's roles are identical to my parents'. What has worked for them will obviously work for me.

4. There's no single "life style" which appeals to me more than another.

5. There are a lot of different kinds of people. I'm still exploring the many possibilities to find the right kind of friends for me.

6. I sometimes join in recreational activities when asked, but I rarely try anything on my own.

7. I haven't really thought about a "dating style." I'm not too concerned whether I date or not.

8. Politics is something that I can never be too sure about because things change so fast. But I do think it's important to know what I can politically stand for and believe in.

9. I'm still trying to decide how capable I am as a person and what jobs will be right for me.
10. I don't give religion much thought and it's doesn't bother me one way or the other.

11. There's so many ways to divide responsibilities in marriage, I'm trying to decide what will work for me.

12. I'm looking for an acceptable perspective for my own "life style" view, but haven't really found one yet.

13. There are many reasons for friendship, but I choose my close friends on the basis of certain values and similarities that I've personally decided on.

14. While I don't have one recreational activity I'm really committed to, I'm experiencing numerous leisure outlets to identify one I can truly enjoy.

15. Based on past experiences, I've chosen the type of dating relationship I want now.

16. I haven't really considered politics. It just doesn't excite me much.

17. I might have thought about a lot of different jobs, but there's never really been any question since my parents said what they wanted.

18. A person's faith is unique to each individual. I've considered and reconsidered it myself and know what I can believe.

19. I've never really seriously considered men's and women's roles in marriage. It just doesn't seem to concern me.

20. After considerable thought I've developed my own individual viewpoint of what is for me an ideal "life style" and don't believe anyone will be likely to change my perspective.

21. My parents know what's best for me in terms of how to choose my friends.

22. I've chosen one or more recreational activities to engage in regularly from lots of things and I'm satisfied with those choices.

23. I don't think about dating much. I just kind of take it as it comes.
Appendix A-3

24. I guess I'm pretty much like my folks when it comes to politics. I follow what they do in terms of voting and such.

25. I'm really not interested in finding the right job, any job will do. I just seem to flow with what is available.

26. I'm not sure what religion means to me. I'd like to make up my mind but I'm not done looking yet.

27. My ideas about men's and women's roles have come right from my parents and family. I haven't seen any need to look further.

28. My own views on a desirable life style were taught to me by my parents and I don't see any need to question what they taught me.

29. I don't have any real close friends, and I don't think I'm looking for one right now.

30. Sometimes I join in leisure activities, but I really don't see a need to look for a particular activity to do regularly.

31. I'm trying out different types of dating relationships. I just haven't decided what is best for me.

32. There are so many different political parties and ideals. I can't decide which to follow until I figure it all out.

33. It took me a while to figure it out, but now I really know what I want for a career.

34. Religion is confusing to me right now. I keep changing my views on what is right and wrong for me.

35. I've spent some time thinking about men's and women's roles in marriage and I've decided what will work best for me.

36. In finding an acceptable viewpoint to life itself, I find myself engaging in a lot of discussions with others and some self exploration.

37. I only pick friends my parents would approve of.
Appendix A-4

38. I've always liked doing the same recreational activities my parents do and haven't ever seriously considered anything else.

39. I only go out with the type of people my parents expect me to date.

40. I've thought my political beliefs through and realize I can agree with some and not other aspects of what my parents believe.

41. My parents decided a long time ago what I should go into for employment and I'm following through their plans.

42. I've gone through a period of serious questions about faith and can now say I understand what I believe in as an individual.

43. I've been thinking about the roles that husbands and wives play a lot these days, and I've trying to make a final decision.

44. My parents' views on life are good enough for me, I don't need anything else.

45. I've had many different friendships and now I have a clear idea of what I look for in a friend.

46. After trying a lot of different recreational activities I've found one or more I really enjoy doing by myself or with friends.

47. My preferences about dating are still in the process of developing. I haven't fully decided yet.

48. I'm not sure about my political beliefs, but I'm trying to figure out what I can truly believe in.

49. It took me a long time to decide but now I know for sure what direction to move in for a career.

50. I attend the same church as my family has always attended. I've never really questioned why.

51. There are many ways that married couples can divide up family responsibilities. I've thought about lots of ways, and now I know exactly how I want it to happen.
Appendix A-5

52. I guess I just kind of enjoy life in general, and I don't see myself living by any particular viewpoint to life.

53. I don't have any close friends. I just like to hang around with the crowd.

54. I've been experiencing a variety of recreational activities in hopes of finding one or more I can really enjoy for some time to come.

55. I've dated different types of people and know exactly what my own "unwritten rules" for dating are and who I will date.

56. I really have never been involved in politics enough to have made a firm stand one way or the other.

57. I just can't decide what to do for an occupation. There are so many that have possibilities.

58. I've never really questioned my religion. If it's right for my parents it must be right for me.

59. Opinions on men's and women's roles seem so varied that I don't think much about it.

60. After a lot of self-examination I have established a very definite view on what my own life style will be.

61. I really don't know what kind of friend is best for me. I'm trying to figure out exactly what friendship means to me.

62. All of my recreational preferences I got from my parents and I haven't really tried anything else.

63. I date only people my parents would approve of.

64. My folks have always had their own political and moral beliefs about issues like abortion and mercy killing and I've always gone along accepting what they have.
Appendix A-6

**Question domains**

**Achievement:** 8, 13, 15, 18, 20, 22, 33, 35, 40, 42, 45, 46, 49, 51, 55, 60.

**Moratorium:** 5, 9, 11, 12, 14, 26, 31, 32, 34, 36, 43, 47, 48, 54, 57, 61.

**Foreclosure:** 3, 17, 21, 24, 27, 28, 37, 38, 39, 41, 44, 50, 58, 62, 63, 64.

**Diffusion:** 1, 2, 4, 6, 7, 10, 16, 19, 23, 25, 29, 30, 52, 53, 56, 59.
Appendix B

Eriksonian Psychosocial Stage Inventory
(Rosenthal et al., 1981)
Appendix B-1

Eriksonian Psychosocial Stage Inventory (Rosenthal et al., 1981)

This opinion survey has no correct or incorrect answers. Answer the following questions by writing the appropriate number on the score sheet. Do not write on this questionnaire:

A = strongly agree
B = moderately agree
C = agree
D = disagree
E = moderately disagree
F = strongly disagree

1. I am able to take things as they come.
2. I can’t make sense of my life.
3. I wish I had more self control.
4. I get embarrassed when someone begins to tell me personal things.
5. I can’t make up my own mind about things.

6. I change my opinion of myself a lot.
7. I am able to be first with new ideas.
8. I’m never going to get on in this world.
9. I’m ready to get involved with a special person.
10. I’ve got a clear idea of what I want to be.

11. I feel mixed up.
12. I find the world a very confusing place.
13. I know when to please myself and when to please others.
14. The important things in life are clear to me.
15. I don’t seem to be able to achieve my ambitions.

16. I don’t seem to have the ability that most others have got.
17. I’ve got it all together.
18. I know what kind of person I am.
19. I worry about losing control of my feelings.
20. I have few doubts about myself.
Appendix B-2

21. I rely on other people to give me ideas.
22. I don't enjoy working.
23. I think I must be basically bad.
24. Other people understand me.
25. I'm a hard worker.

26. I feel guilty about many things.
27. I'm warm and friendly.
28. I really believe in myself.
29. I can't decide what I want to do with my life.
30. It's important to me to be completely open with my friends.

31. I find that good things never last long.
32. I feel I am a useful person to have around.
33. I keep what I really think and feel to myself.
34. I'm an energetic person who does lots of things.
35. I'm trying hard to achieve my goals.

36. Things and people usually turn out well for me.
37. I have a strong sense of what it means to be female/male.
38. I think the world and people in it are basically good.
39. I am ashamed of myself.
40. I'm good at my work.

41. I think it's crazy to get too involved with people.
42. People are out to get me.
43. I like myself and am proud of what I stand for.
44. I don't really know what I'm all about.
45. I can't stand lazy people.
Appendix B-3

46. I can stop myself from things I shouldn't be doing.
47. I find myself expecting the worst to happen.
48. I care deeply for others.
49. I find I have to keep up a front when I'm with people.
50. I find myself denying things even though they are true.

51. I don't really feel involved.
52. I waste a lot of my time messing about.
53. I'm as good as other people.
54. I like to make my own choices.
55. I don't feel confident of my judgment.

56. I'm basically a loner.
57. I cope very well.
58. I'm not much good at things that need brains or skill.
59. I have a close physical and emotional relationship with another person.
60. I stick with things until they're finished.

61. I'm a follower rather than a leader.
62. I can stand on my own two feet.
63. I find it hard to make up my mind.
64. I trust people.
65. I like my freedom and don't want to be tied down.

66. I like new adventures.
67. I prefer not to show too much of myself to others.
68. I don't get things finished.
69. I like finding out about new things or places.
70. I don't get much done.

71. Being alone with other people makes me feel uncomfortable.
72. I find it easy to make close friends.
Appendix B-4

**Question domain**

Trust: 3, 12, 19, 20, 24, 31, 36, 38, 42, 47, 53, 64.
Autonomy: 1, 2, 5, 8, 13, 28, 39, 54, 55, 62, 63, 65.
Initiative: 7, 16, 21, 23, 26, 34, 46, 50, 57, 61, 66, 69.
Industry: 15, 22, 25, 32, 35, 40, 45, 52, 58, 60, 68, 70.
Identity: 6, 10, 11, 14, 17, 18, 29, 37, 43, 44, 49, 51.

Reverse underlined scores.
Appendix C

Interpersonal Trust Scale

(Rotter, 1966)
Appendix C-1

Interpersonal Trust Scale
(Rotter, 1966)

1. Hypocrisy is on the increase in our society. (R)

2. In dealing with strangers one is better off to be cautious until they have provided evidence that they are trustworthy. (R)

3. This country has a dark future unless we can attract better people into politics. (R)

4. Fear and social disgrace or punishment rather than conscience prevents most people from breaking the law. (R)

5. Using the honor system of not having a teacher present during exams would probably result in increased cheating. (R)

6. Parents usually can be relied on to keep their promises.

7. The United Nations will never be an effective force in keeping world peace. (R)

8. The judiciary is a place where we can all get unbiased treatment.

9. Most people would be horrified if they knew how much news that the public hears and sees is distorted. (R)

10. It is safe to believe that in spite of what people say most people are primarily interested in their own welfare.

11. Even though we have reports in newspapers, radio, and T.V., it is hard to get objective accounts of public events. (R)
Appendix C-2

12. The future seems very promising.

13. If we really knew what was going on in international politics, the public would have reason to be more frightened than they now seem to be. (R)

14. Most elected officials are really sincere in their campaign promises.

15. Many major national sports contests are fixed in one way or another. (R)

16. Most experts can be relied upon to tell the truth about the limits of their knowledge.

17. Most parents can be relied upon to carry out their threats of punishments.

18. Most people can be counted on to do what they say they will do.

19. In these competitive times one has to be alert or someone is likely to take advantage of you. (R)

20. Most idealists are sincere and usually practice what they preach.

21. Most salesmen are honest in describing their products.

22. Most students in school would not cheat even if they were sure of getting away with it.

23. Most repairmen will not overcharge even if they think you are ignorant of their specialty.
Appendix C-3

24. A large share of accident claims filed against insurance companies are phony. (R)

25. Most people answer public opinion polls honestly.

Reverse scores on items: 1, 2, 3, 4, 5, 7, 9, 11, 13, 15, 19, 24.
Appendix D

Emotional Autonomy Scale
(Steinberg & Silverberg, 1986)
Appendix D-1

Emotional Autonomy Scale
(Steinberg & Silverberg, 1986)

Indicate on the score sheet the degree to which you agree or disagree with each statement by using the following scale:

A = strongly agree
B = moderately agree
C = agree
D = disagree
E = moderately disagree
F = strongly disagree

1. My parents and I agree on everything. (R)

2. I go to my parents for help before trying to solve a problem myself. (R)

3. I have often wondered how my parents act when I'm no around.

4. Even when my parents and I disagree, my parents are always right. (R)

5. It's better for kids to go to their best friend than to their parents for advice on some things.

6. When I've done something wrong, I depend on my parents to straighten things out for me. (R)

7. There are some things about me that my parents don't know.

8. My parents act differently when they are with their own parents from the way they do home.
Appendix D-2

9. My parents know everything there is to know about me. (R)

10. I might be surprised to see how my parents act at a party.

11. I try to have the same opinions as my parents. (R)

12. When they are at work, my parents act pretty much the same way they do when they are at home. (R)

13. If I was having a problem with one of my friends, I would discuss it with my mother or father before deciding what to do about it. (R)

14. My parents would be surprised to know what I'm like when I'm not with them.

15. When I become a parent, I'm going to treat my children in exactly the same way that my parents have treated me. (R)

16. My parents probably talk about different things when I am around from what they talk about when I'm not.

17. There are things that I will do differently from my mother and father when I become a parent.

18. My parents hardly ever make mistakes. (R)

19. I wish my parents would understand who I really am.

20. My parents act pretty much the same way when they are with their friends as they do when they are at home with me. (R)

Note: (R) denotes items to be reversed in scoring.
Appendix E

Initiative/Guilt Subscales of the Ego Stage Development Inventory
(Caillet, 1980)
Appendix E-1

Initiative/Guilt Subscales of the Ego Stage Development Inventory (Caillet, 1980)

Initiative items:

1. I make it a point to meet people who interest me.

2. When it come to social and public programs, I am an initiator of action.

3. As a child, I had an active imagination.

4. Even as a child, I was working toward some goal or object.

5. I am inventive, an idea person.

6. When doing things with my close friends, I am the one who thinks of the ideas and makes the plans.

7. In reference to the clubs and organizations I belong to, I participate in and take responsibility for the planning of goals and objectives.

8. I organize physical activities and other outdoor events for my friends and myself.

9. When young, I came up with good ideas for projects with family and friends.

10. I plan and follow a program of physical activity and diet in order to meet my specified exercise and weight goals.

11. I enjoy planning social activities.
Appendix E-2

12. I trust my close friends.

Guilt items: [all reverse scored (R)]

13. When in large groups, I tend to let others make the plans and arrangements. (R)

14. I let others initiate physical activities. (R)

15. I find myself lowering my goals and expectations rather than fighting for them. (R)

16. I like others to tell me what to do. (R)

17. I feel defeated in my efforts to establish goals and make plans in my work and school settings. (R)

18. I feel guilty about my lack of motivation to participate in physical activities and exercise. (R)

19. I feel guilty about my fantasies and actions. (R)

20. I tend to be inhibited and self-restricted in social situations. (R)

21. Decisions are difficult for me. (R)

22. I feel guilty about my behavior toward others. (R)

23. While growing up, my parents made me feel guilty about my actions. (R)

24. I was a shy child. (R)
Appendix F

Self-Efficacy Scale
(Sherer et al., 1982)
Appendix F-1

Self-Efficacy Scale (Sherer et al., 1982)

1. When I make plans, I am certain I can make them work.

2. One of my problems is that I cannot get down to work when I should. (R)

3. If I can't do a job the first time, I keep trying until I can.

4. When I set important goals for myself, I rarely achieve them. (R)

5. I give up on things before completing them. (R)

6. I avoid facing difficulties. (R)

7. If something looks too complicated, I will not ever bother to try it. (R)

8. When I have something unpleasant to do, I stick to it until I finish it.

9. When I decide to do something, I go right to work on it.

10. When trying to learn something new, I soon give up if I am not initially successful. (R)

11. When unexpected problems occur, I don't handle them well. (R)

12. I avoid trying to learn new things when they look too difficult for me. (R)
Appendix F-2

13. Failure just makes me try harder.

14. I feel insecure about my ability to do things. (R)

15. I am a self-reliant person.

16. I give up easily. (R)

17. I do not seem capable of dealing with most problems that come up in life. (R)

18. It is difficult for me to make new friends. (R)

19. If I see someone I would like to meet, I go to that person instead of waiting for him or her to come to me.

20. If I meet someone interesting who is hard to make friends with, I'll soon stop trying to make friends with that person. (R)

21. When I'm trying to become friends with someone who seems uninterested at first, I don't give up easily.

22. I don not handle myself well in social gatherings. (R)

23. I have acquired my friends through my personal abilities at making friends.

Note: (R) denotes items to be reversed in scoring.
Appendix G

Summary of Factor Analysis Emotional Autonomy Scale and EPSI Autonomy Subscale
Appendix G-1

Factor Analysis Summary of Emotional Autonomy Scale and EPSI Autonomy Subscale

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Factor Correlation Matrix

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Appendix G-2

Autonomy Measures Factor Analysis Structure Martix

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Note: PAF Extraction, Oblique Rotation, Blank (<.4).
Appendix H

Status Group Means by Rank
### Status Group Means by Rank

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<th>EPSI Initi</th>
<th>EPSI Indus</th>
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Appendix I

Discriminant Analysis Classification Results
## Discriminant Analysis Classification Results

### Achieved with Moratorium

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<th>Actual Group</th>
<th>Predicted Achieved</th>
<th>Predicted Moratorium</th>
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<tr>
<td>Achieved</td>
<td>43</td>
<td>33 (76.7%)</td>
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<tr>
<td>Moratorium</td>
<td>26</td>
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Percent of total correctly classified: **84.06%**

### Achieved with Foreclosed

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<td>Achieved</td>
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<td>Foreclosed</td>
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Percent of total correctly classified: **65.82%**

### Achieved with Diffused

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<td>Diffused</td>
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Percent of total correctly classified: **91.04%**
### APPENDIX I-2

**Discriminant Analysis Classification Results**

#### Moratorium with Foreclosed

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<th>Predicted Foreclosed</th>
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<td>8 (22.2%)</td>
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Percent of total correctly classified: 72.58%

#### Moratorium with Diffused

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Percent of total correctly classified: 76.00%

#### Foreclosed with Diffused

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<td>Foreclosed</td>
<td>28 (77.8%)</td>
<td>8 (22.2%)</td>
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<tr>
<td>Diffused</td>
<td>4 (16.7%)</td>
<td>20 (83.3%)</td>
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Percent of total correctly classified: 80.00%