INTEGRITY, DESPAIR AND IN BETWEEN: TOWARD CONSTRUCT VALIDATION OF ERIKSON'S EIGHTH STAGE

by

Simon Hearn

B.A., University of Toronto, 1977
M.Sc., Memorial University of Newfoundland, 1986

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Name: R. Simon F. Hearn

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Title of Thesis: Integrity, Despair, and In Between: Towards Construct Validation for Erikson's Eighth Stage

Examining Committee:

Chair: Dr. Jean Koepke

Dr. James Marcia, Professor
Senior Supervisor

Dr. Raymond Koopman
Associate Professor

Dr. Stephen G. Holliday
Adjunct Professor

Dr. Elinor Ames, Associate Professor
Internal External Examiner

Dr. Susan K. Whitbourne, Professor
Department of Psychology
University of Massachusetts
External Examiner

Date Approved: August 13, 1993

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Integrity, Despair, and In Between: Towards Construct Validation for Erikson's Eighth Stage

Author: _____
(signature)

R. Simon F. Hearn
(name)

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ABSTRACT

One hundred adults 65 and older participated in a semi-structured psychosocial interview based on Erikson's writings on Integrity versus Despair. Subjects were assigned to one of four Integrity statuses by three raters, who achieved moderate reliabilities using an Integrity Status Rating Manual. Dependent variables were: the Integrity subscale from the Modified Eriksonian Psychosocial Inventory, the Openness to Experience scale from the NEO Personality Inventory, the Competence scale from the California Psychological Inventory, the Geriatric Depression Scale, and a measure of Perceived Health. Covariates were age and education. Four measures and education were significantly linked with status groupings, as were two factor analytically derived variables: 'Integrity' and 'Sophistication.' Among other findings, Integrated subjects were competent; Nonexploratory subjects conventional; Pseudointegrated subjects immature; and Despairing subjects demoralized. Life review, considered central to eighth stage personality development by Erikson, occurred rarely. Rather, lifespan continuity of the known self was the goal of aged subjects.

Tortoise:...I've never had the time to analyze Beauty. It's a Capitalized Essence; and I never seem to have the time for Capitalized Essences.

Achilles: Speaking of Capitalized Essences, Mr. T, have you ever wondered about the Purpose of Life?

Tortoise: Oh, heavens, no.

---Douglas Hofstadter: Godel, Escher, Bach: An Eternal Golden Braid

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Some years ago, Lyn Wool completed a dissertation proposal, which also contained an Integrity Interview, to undertake this same project at Simon Fraser University, before she moved on to other concerns. I thank her for her hospitality and for being willing to share that fine proposal, as well as some useful literature, with me.

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Introduction

Statement of Purpose

This study seeks to establish some construct validity for the eighth stage of Erik Erikson's psychosocial theory of the life cycle. Four decades after its publication, Erikson's theory of personality development (1950, 1963, 1980, 1982, 1986) remains one of few schemes whose scope takes in the whole lifespan. Erikson's model is still very widely studied and taught, probably because of its heuristic richness; in addition, research efforts to date which have sought empirical validation for its constructs have succeeded well; they have added considerably to the study of ego development, particularly in adolescence and young adulthood (e.g., see Bourne, 1978a, b; Marcia, 1980; Marcia, Waterman, Matteson, Orlofsky, and Archer, in press; Matteson, 1975; and Waterman, 1982, for reviews of over 25 years' publications using Marcia's Identity Status Interview to investigate the fifth psychosocial stage; see Orlofsky [in Marcia, et al., in press] for a review of work using Orlofsky, Marcia and Lesser's (1973) instrument for assessing Intimacy Status). Studies in the comparatively unknown regions of lifespan personality change must be theory-guided, and Erikson's model quite credibly provides such a theoretical framework (Whitbourne, 1985).

The present study, then, tries to find empirical support for his hypotheses about the development of personality in old age, during the last of his eight stages

of personality growth. The central conflict of this stage, between Ego Integrity and Despair, belongs to the retirement era, when an active-generative mode of living has mainly been relinquished. Erikson wrote that the ego task at this time is to integrate: One must review one's life honestly, taking stock of disappointments and successes; the goal is an overall perception which compassionately balances an historical understanding of events with larger philosophical understanding. The subsequent task is to integrate one's individual story into the larger stories of the cultural groups one is part of, and into the story of the human race as a whole. Failure or incapacity to decide that, overall, life has been worthwhile, means that some degree of Despair--futility and meaninglessness--will predominate.

Background: Erikson's contributions to psychoanalytic theory.

Erik Erikson's (1902-) professional life in psychoanalysis began in Vienna in the 1930s. He was analyzed by Anna Freud, and started clinical practice in the United States shortly afterwards. While Vienna was the major setting for psychoanalysis in its early years, Erikson does not belong to the first generation of classical analysts. His training analysis with Anna Freud marks his connection to its second major era, during which the psychology of the ego, more than that of the id, began to acquire importance. Today, Erikson is most widely recognized as a thinker who

greatly expanded (1950, 1963) what were, in the 1930s, 40s, and 50s, new theories of ego function.

Within psychoanalysis, the shift toward study of the ego's nature and functions occurred gradually. Sigmund Freud devoted the greatest part of his attention to the instinctual drives underlying human behaviour--the 'seething cauldron' of the id--because they comprised the newest and the most challenging parts of his discoveries. Freud expected that his claims for infant sexuality and the Oedipus complex would be widely repudiated; this prediction gave him a sense of mission in stressing their existence and importance. Adherents of classical psychoanalytic theory have, indeed, claimed that shifts in emphasis away from the instinctual roots of behaviour represent regressive evasions (Malcolm, 1981; Jacoby, 1975). It was with the intention of augmenting, not undermining, Freud's groundbreaking work that Anna Freud (1936) and Heinz Hartmann (1958; Hartmann, Kris, and Loewenstein, 1946) began to expand current conceptions of ego functions. Yet, while both denied wanting to alter the central dogmas of the movement, their innovations did implicitly change the theory and practice of psychoanalysis. Erikson elaborated and articulated the new implications, explicitly putting the ego, rather than the id, at the centre of his model of personality development.

Until then, ego functions had been regarded as carrying secondary importance--as only the surface derivatives, nearly epiphenomena, of libidinal vicissitudes. But in her

classic text, Anna Freud (1936) introduced the study of ego defense mechanisms; and Hartmann (1958) went further, asserting for the first time that the ego possessed independent energies, though these were still said to have instinctual sources. Hartmann argued that the orthodox model, which interpreted most behaviour in terms of underlying primitive drives, could not convincingly explain the full range of human adaptations for survival. He proposed that while ego and id originate from the same "undifferentiated matrix," the ego proceeds to evolve at least a somewhat autonomous life of its own through maturation and learning (Hartmann, Kris and Loewenstein, 1946). Erikson elaborated and articulated much of what was implicit in Hartmann's writings, by exploring how the ego develops and copes in what Hartmann (1958) had called the 'average expectable environment' (Rapaport, 1959). This perspective stood in marked contrast to Freud's, in which the individual was portrayed as a collection of appetites chafing at restraints imposed by the necessity of social coexistence.

Though the new explorations slowly began to legitimize study of the conscious mind, psychodynamic attention still remained consistently focused on the intrapsychic world; the external world, as from the earliest years of the movement, tended to be neglected as the happenstance background against which inner battles between id, ego and superego were played out (Greenberg and Mitchell, 1983). Erikson

objected to this imbalance, which undervalued the social world and its multifarious influences on the individual life course. It was a second major part of his achievement to provide a means to initiate research, not only into the nature of the ego with its expectable tasks and coping strategies, but into the expectable interchanges between the average person and his or her society over the average lifespan.

Erikson's attention centered on normal, rather than pathological personality development. His scheme of ego development, which he called 'psychosocial,' remained psychoanalytic, in that it incorporated and built on Freud's psychosexual stages of development; nevertheless, he expanded the psychodynamic frame of reference to include, not only the external world, but all ages in the human life cycle. Like Freud's, his scheme is epigenetic, meaning that the development of the ego is understood as one part of the total growth of the organism, including biological, intellectual, and emotional dimensions. As the oral, anal, and phallic stages structured
child development for the libidinal self in classical psychoanalytic theory, the eight stages of Erikson's psychosocial theory structure the ego's growth over the lifespan.

Erikson's Eight-Stage Scheme

Each of the stages in Erikson's scheme represents another emotional hurdle for the personality. The stages are held to be universal, to occur in all humans, and to occur in invariant order. As each new chronological stage is entered, the person must use whatever resources he or she has acquired to that point to negotiate its tasks. If these are poorly resolved, the person proceeds through time carrying the unsettled dilemmas with him or her. While they can be addressed at any later point, the healthy personality will negotiate each stage's conflicts in a generally favorable way during its normative age period.

Erikson's scheme describes the ideal balancing of the person's own growth with the culture's ongoing pressures for adjustment to its structures. Individual and society influence each other like interlocking cogwheels (Erikson, 1963). Each stage of ego growth is defined in terms of a pair of opposing constructs, for example, the first one, 'Trust vs. Mistrust;' the poles of each pair represent the favorable and unfavorable sides of that hurdle. Successful resolution of a given stage is not an either/or accomplishment; rather, it is a relatively good, overall achievement which entails an experienced appreciation and synthesis of both rough and smooth (Marcia, 1976). Neither is progress through the stages a rigidly linear process: Psychosocial development, like the physical state, is perpetually in flux (Erikson, 1963).

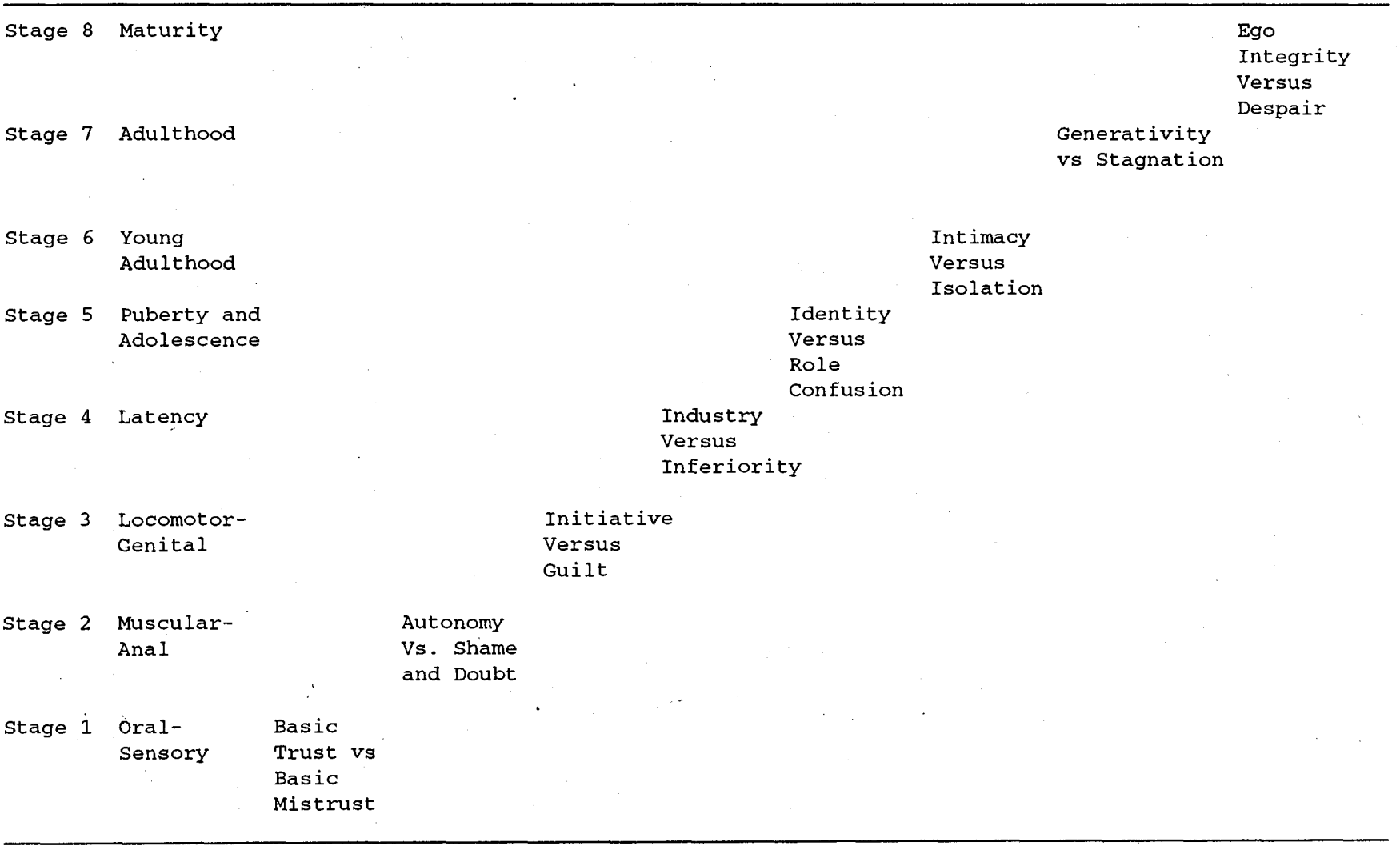
The central conflicts of each stage can be briefly summarized as follows:

1) The first problem for ego growth, belonging to the first year of life, is to establish a sense of Basic Trust over Basic Mistrust in the safety of the world. If a secure emotional atmosphere is created for the infant through reliably responsive parenting, she or he will feel safe enough to explore new things and experiment with the unknown. Without an adequate inner reservoir of reassuring feelings, the child will be preoccupied with looking for the still-needed security, and be less emotionally free in seeking mastery of self and environment.

2) The second-stage conflict, arising in early childhood (age 2-3), entails the struggle between an emerging sense of Autonomy versus feelings of Shame and Doubt. The child will be more or less threatened by the emerging sense of being a separate individual, depending on the extent to which he or she has internalized reliable emotional support from caregivers. The healthier ego will enjoy a sense of strong independence; the less secure will be beset by misgivings over personal adequacy.

3) The third struggle for the ego, belonging to the play age (3-4 years), is that between Initiative and Guilt. By this age, the superego, comprising a mixture of internalized moral directives and ego-ideal images, is present in the personality. This stage's conflict concerns the degree to which spontaneous spirits of curiosity and adventure are

Figure 1.
An Epigenetic Diagram



kept alive despite internalized inhibitions on impulse expression. Exaggerated fears of punishment and excessively rigid inhibitions will stultify growth.

4) The fourth conflict, confronted during the elementary school years up to adolescence, has to do with the child's confidence in his or her personal productivity (the sense of Industry) in technical, particularly school-related, tasks. Excessive doubts about personal adequacy (Inferiority) will inhibit the growth of competence.

5) The fifth stage, Identity Achievement versus Diffusion, is probably the most significant one, because it concerns a restructuring of the self, whereas the other stages have to do with acquiring a less pervading 'sense' of Industry, Intimacy, Generativity, etc. Achieving Identity entails a personal questioning of parental and social values in regard to major existential questions about how life is to be lived--in the areas of religion, politics, vocational preferences, interpersonal relationships, and other key realms. Failure to decide independently where one stands on such issues means that to a greater or lesser extent one's life course will be determined by other people and historical circumstances.

6) The next developmental challenge, normatively arising during a person's twenties, is to find an intimate partner with whom to share experience. To the extent that one possesses personal autonomy, one will be free to invest oneself in loving partnership (Intimacy) without fear over

losing personal boundaries. Uncertainty over personal Identity and/or excessive fears of invasion or entrapment will move the person toward Isolation.

7) The seventh struggle, between Generativity and Stagnation, concerns existential commitment to the world, manifested in prosocial action. In this stage, which belongs to the years of productive adulthood, the healthier personality commits him or herself to the maintenance of the communal world. This means raising and educating younger people, as well as working to keeping society safe and prosperous. A person who parents or works without a higher sense of contribution to the culture is prone to Stagnation.

8) The conflict of the eighth stage is the struggle between Integrity and Despair. Achieving Integrity entails a definitive planting of the self in the soil of one's communal world, both as a public follower of the culture's greater figureheads and as a figurehead for younger people. Integrity, for Erikson, entails knowing who you are (Identity Achievement), knowing why you are that way (having engaged in thorough life review), and still standing in favour of self, society and world. One takes such a position in open-eyed recognition of painful realities. By asserting the validity of self and lifestyle, the Integrated person validates the life course and accepts the idea of closure, which makes death less frightening. Failure to accept and like self and world despite the shortcomings leads to some

predominance of Despair. This stage will be discussed in greater detail below.

Though Erikson has called his scheme 'psychosocial,' its epigenetic nature means that biological aspects of personal development are as important as the psychological and social aspects, so it is also a biopsychosocial model (Erikson, 1982). Over successive revisions, Erikson has clarified and amplified the meaning of each stage (1963, 1968a, 1982; Erikson, Erikson, and Kivnick, 1986; see Figures 1 and 2). He has at some point specified for all the stages: The related psychosexual stages and modes, the radii of significant relations, the adaptive strengths, the potential maladaptive and malignant developments, the core pathologies and basic antipathies, the principles of social order, the binding ritualizations and the ritualisms, the cognitive skills and imaginal themes, and the psychosocial modalities.

Many of these terms, as presented in Figures 1 and 2, are self-explanatory. The cognitive skills and imaginal themes describe the characteristic preoccupations of persons at the different stages. The psychosexual stages and modes concern the physical dimensions, and the radii of significant relations have to do with the most important kinds of human relationships at each stage. The basic strengths are the personal qualities forged following resolution of each psychosocial crisis; core pathologies and basic antipathies are the problems which surface when the

various psychosocial crises are not resolved. The related principles of social order reveal how the central preoccupations of each stage are reflected and manifested in organizational principles of the social world. For instance, in the industry stage, which centres on the acquisition of technical mastery, children acquire a feeling for the Technological Order.

Binding ritualizations and ritualisms reveal how the themes of each stage are played out in larger kinds of social and institutional ceremony. For instance, Erikson links the close and loving feelings inspired in mother and infant together, which flow from their own unique and private rituals, to the 'numinous' emotions which are part of religious awe in adults. The ritualizations of the sixth stage, concerned with adult intimacy, are 'affiliative,' and manifest wherever in-groups form, wherever personal and communal style are mutually identified. Ritualisms are distortions of ritualizations: Numinous religiosity can become idolism, and affiliation can turn into elitism.

Erikson detailed these many implications of the stages partly as a way of elaborating their meanings; he wanted to show how each stage entails an encompassing worldview which manifests itself in physical behaviour, emotional strengths and weaknesses, and in ways and principles of social belonging, at domestic, community, national, and global levels. The resolution of every new stage brings a broadening and deepening of personal vision, so that the

person can put to use new complexities and wider perspectives.

In summary, Erikson broadened traditional psychoanalytic perspectives in many ways. He contributed to and built up the study of ego functions, and persuasively drew attention to the social world outside the individual's psyche. He devised a scheme characterizing the psychosocial life course, and showed how social institutions are both the creations and reflections of its growth stages. So, marriage was created by the epigenetic needs of young adults for partnership outside the nuclear family, for sexual satisfaction and procreation, to validate the partners as adults in an adult world; simultaneously, the presence of marriage challenges them to achieve those things.

Erikson also described the ways in which the individual ego can meet or fail to meet the age-stage challenges, so creating a framework for assessment and treatment in psychotherapy. His scheme is meaningful to traditional psychoanalysts as well as to less theoretically committed developmental psychologists. Ultimately, it is the great depth and breadth of his model which requires and justifies its continued research exploration.

An exploration of what Erikson meant by 'Integrity and Despair'

In the following classic passage, Erikson outlined the main components of the constructs 'integrity' and 'despair:'

Only in him who in some way has taken care of things and people and has adapted himself to the triumphs and disappointments adherent to being, the originator of others or the generator of products and ideas--only in him may gradually ripen the fruit of these seven stages. I know no better word for it than ego integrity...It is the ego's accrued assurance of its proclivity for order and meaning. It is a post-narcissistic love of the human ego--not of the self--as an experience which conveys some world order and spiritual sense, no matter how dearly paid for. It is the acceptance of one's one and only life cycle as something that had to be and that, by necessity, permitted of no substitutions; it thus means a new, a different love of one's parents. It is a comradeship with the ordering ways of distant times and different pursuits, as expressed in the simple products and sayings of such times and pursuits. Although aware of the relativity of all the various life styles which have given meaning to human striving, the possessor of integrity is ready to defend the dignity of his own life style against all physical and economic threats. For he knows that an individual life is the accidental coincidence of but one life cycle with but one segment of history; and that for him all human integrity stands or falls with the one style of integrity of which he partakes. The style of integrity developed by his culture or civilization thus becomes the 'patrimony of his soul,'the seal of his moral paternity of himself...In such final consolidation, death loses its sting. The lack or loss of this accrued ego integration is signified by fear of death: the one and only life cycle is not accepted as the ultimate of life. Despair expresses the feeling that the time is now short, too short for the attempt to start another life and to try out alternate roads to integrity. Disgust hides despair, if often only in the form of a 'thousand little disgusts' which do not add up to one big remorse...Each individual, to become a

> mature adult, must to a sufficient degree develop all the ego qualities mentioned, so that a wise Indian, a true gentleman, and a mature peasant share and recognize in one another the final stage of integrity...Infantile conflicts become creative only if sustained by the firm support of cultural institutions and of the special leader classes representing them. In order to approach or experience integrity, the individual must know how to be a follower of image bearers in religion and politics, in the economic order and in technology, in aristocratic living and in the arts and sciences. Ego integrity, therefore, implies an emotional integration which permits participation by followership as well as acceptance of the responsibility of leadership.
> (Erikson, 1963, pp. 268-269)

To begin, then, Erikson is saying that the relative proximity of death in old age (disintegration) forces the question of personal integrity for the individual. He states that, consciously or not, each person in retirement years asks him or herself, what have I made of my life, what have I to be proud of, to make up for, and what will I do about these things? What has my life meant, and how do I feel about that? In his scheme, one arrives either at an overall state of reconciliation and acceptance (integration), or a general state of despondence (despair), which would mean deciding that in the balance, one's life has been disappointing, unrealized.

It may seem simplistic to say that the eighth stage concerns simply whether one's life has been good enough or

not. But Erikson's scheme, which aims to depict the central life tasks facing all people, is simple and broad. In facing extinction, the individual will naturally prefer some aspects of his or her life to others, but eventually homes in on that one question.

Erikson says that first of all, the person measures the acceptability of what he or she has done. The awareness of having contributed reasonably is crucial. Having "taken care of things and people and adapted [oneself] to the triumphs and disappointments adherent to being," refers to being existentially engaged, and having accepted the risks and rewards of life. Those who have failed in generativity--caring for, sustaining the world in subjectively meaningful ways--cannot "ripen the fruit" of the prior stages and experiences. Not having committed to any generative acitivity means one staked oneself nowhere, and acted no meaningful part. This is a reminder that resolution of the later stage depends on that of the previous stages.

It is implicit that, as always for Erikson, the examination of what one has done is undertaken simultaneously from private and public perspectives; both the social being and the private self are sized up.

Erikson addresses "the ego's assurance of its accrued proclivity for meaning" and the "post-narcissistic love of the human ego...as an experience which conveys some world order and spiritual sense, no matter how dearly paid for." He seems to mean that as the individual contemplates his or

her life history, satisfaction comes simply from the sense, "that is the me that I know, and I can rely on the regularity of my self's ways, which reliably and successfully blend with those of my culture." There is validating pleasure, he suggests, in this feeling of self-recognition, earned through coping with life challenges and emerging relatively intact, ("the...ego...as an experience which conveys some world order and spiritual sense, no matter how dearly paid for" (1963, p. 268). The integrated person can appreciate, by extension, all other personal histories as well ("the post-narcissistic love of the human ego..." [1963, p. 269]). If one life is positively meaningful, all are or can be. The key, it would appear, is a reasonably strong, reliably present, participant-observer self. The strength of such a self depends on experiences with the previous stages.

These phrases suggest that existence often feels inherently worthwhile to the integrated person, while the despairing feel this less often. Erikson says that reconciliation with one's own life means acceptance of who and what its essential people and episodes were. One no longer rails against who one's parents were or might have been, what they did or failed to do, but sees that they had histories of their own. Further implicit here is an appreciation of the world-historical and the psychological-developmental forces which formed one's life course. Such things "had to be" both because they in turn represented the

outcomes of other forces, and because they are now unchangeable.

The integrated person can also comprehend and appreciate the efforts of all cultures to create ordered, civilizing, communities, whatever their particular ways and wisdoms.

Integration also means defending home and hearth against threat. Such defense both validates and is validated by the already-established sociocultural meaningfulness of one's own ways. In acting to defend his or her local group mores, the integrated person confirms the worthwhileness of local ways everywhere.

It is central to Erikson's concept of Integrity that death becomes more conceivable ("loses its sting") when one belong to a definable community as a member in good standing.

In the third paragraph, Erikson discusses the larger social ramifications of being integrated. One belongs to a family, a local community, and a larger society. Cultural and religious systems interpret and structure the acting out of infantile psychosexual conflicts in different ways; what is important is that the society is bound together by shared, widespread allegiance to figureheads, secular and spiritual. The integrated person is a committed follower, or at least respecter, of the society's figureheads, seeing that such allegiances define and unite the group. He or she would forfeit belongingness, an essential part of integrity,

Figure 2 - The Life Cycle

	A Psycho-sexual stages and Modes		B Psychosocial crises	C Radius of Significant Relations	D Basic Strengths	E Core Pathology/ Basic antipathies	F Principles of Social Order	G Binding Ritualizations	H Ritualisms
1.	INFANCY	Oral	Basic Trust vs Basic Mistrust	Maternal Person	Hope	Withdrawal	Cosmic Order	Numinous	Idolism
2.	EARLY CHILDHOOD	Anal	Autonomy vs Shame and Doubt	Parental Persons	Will	Compulsion	"law and order"	Judicious	Legalism
3.	PLAY AGE	Genital	Initiative vs Guilt	Basic Family	Purpose	Inhibition	Ideal Prototypes	Dramatic	Moralism
4.	SCHOOL AGE	Latency	Industry vs Inferiority	"Neighbourhood" School	Competence	Inertia	Technological Order	Formal (Technical)	Formalism
5.	ADOLESCENCE	Puberty	Identity vs Identity Confusion	Peer groups and out groups	Fidelity	Repudiation	Ideological World View	Ideological	Totalism
6.	YOUNG ADULTHOOD	Genitality	Intimacy vs Isolation	Partners in friendship, sex, cooperation, competition	Love	Exclusivity	Patterns of Cooperation and Competition	Affiliative	Elitism
7.	ADULTHOOD	(Procreativity)	Generativity vs Stagnation	Divided labor and shared household	Care	Rejectivity	Currents of Education and Tradition	Generational	Authoritism
8.	OLD AGE	(Generalization of Sensual Modes)	Integrity vs Despair	"Mankind" "My Kind"	Wisdom	Disdain	Wisdom	Philosophical	Dogmatism

by repudiating these figureheads, who embody key values. Such figures are not only religious or mythical, but also are embodied in the present in the status leaders of the upper classes; archetypally speaking, such people are intended to embody the culture's noblest attributes, having honorably earned the associated responsibilities and privileges, and not abusing them. Through being able to follow social leaders, the integrated person demonstrates his or her own potential for leadership, for being an elder, an exemplar of how to live the good life in that culture.

The Despairing person cannot affirm the satisfactoriness of his or her own memories or self-concept. There is an insufficient sense of belonging and there is insufficient time left to try again to find fulfillment. Erikson says this person feels "a thousand little disgusts," which do not add up to remorse; remorse would entail grieving, and that would entail acceptance of responsibility for one's existence. Grieving would allow the person to cut losses and build on what remained. The despairing person fails through not accepting self-responsibility, and enters instead into a position of restless nay-saying, in an endless self-disqualifying loop.

"Integration" and "Despair" are not monolithic states. Erikson says that a healthy person may well at times feel disappointment in life, the world, him or herself; disdain and disgust, principal components of despair, can be natural in a feeling person contemplating existence. Similarly, a

despairing person who cannot conquer pervasive disappointment may be wisely and persuasively pessimistic. Integration, however, entails acknowledging despair, absorbing and accomodating it. This state entails in the end an existential commitment in favour of life; and Erikson says existential integrity is "the only true immortality that can be promised" (1982, p. 14).

Literature Review

It is here appropriate to review some research on related issues in the study of personality development in late life.

The Life Review

For Erikson, a major part of the eighth stage is the life review. As he describes it, the eighth stage, like the Identity stage, is transformative; the person changes after meeting its challenges. The impending end of life presents a crisis of self-assessment concerning the questions: Are my life and self acceptable to me and the world? These questions provoke the person to take inventory of his or her life course, which entails more than assessment of one's own individual history:

> ...it demands new and ruthless insights into the functioning and malfunctioning of society... (Erikson, 1975, p. 100)

The present in a person's life is considered for

> ...its meaning in the stage of [one's own] life, and secondly,...its meaning in the course of [one's] whole life history...at the same time it must be seen in the immediate context of contemporary history and the historical process of which that period is but a stage...
>
> ...a psychohistorical reviewer would have to fathom--in one intuitive configuration of thought if he can and with the help of a diagram if he must--the complementarity of at least four conditions under which a [personal] record emerges. (Erikson, 1975, pp. 127-128; p. 136).

The life review calls for both personal honesty and sociohistorical vision. One's individual history is to be thought of in the same way that Erikson thought of the histories of Martin Luther and Gandhi: As a story which makes manifest the key truths of one's own biography, those of one's society, and those of the world history in which person and society are embedded.

However, not everyone successfully reconciles the gains and regrets of his or her lifetime with such breadth of understanding. Erikson noted a tendency in some elderly interviewees to edit and improve their life stories; interpreting this behavior as a defense against despair, he said they were creating "pseudo-integration" (1982, p. 65). As shall be seen, this finding is echoed in the writings of other investigators who, independently or following Erikson, have also contributed observations on the life review.

Charlotte Buhler (1935, 1959; Buhler and Massarik, 1968) was a pioneer in exploring the lifespan perspective on personality. Through intensive biographical interviews with 400 Viennese citizens conducted in the 1930s, she and associates identified a number of common age phases and trends in development across the life course. She observed that most people do evaluate their lives, but saw life review beginning in the years from 45 to 65, when intimations of mortality began to press. Once 65 had passed, she noted in her subjects "the gradually-evolving awareness of the past life as a whole" (1968, p. 198), and the "balance sheet" style of life reviewing (Frenkel-Brunswik, 1968, p. 84). Like Erikson and others, she saw varying levels of maturity in peoples' autobiographical accounts, and while there were instances of both fulfillment and despair, 'resignation' was the most common attitude.

Peck (1955) wrote that while some see past the boundaries of their own personal circumstances in life reviewing, others do not make that imaginative leap. Those who can think of their lives in the larger world context can achieve a more satisfying life through generative acts offered to the world that will live on. Using Eriksonian notions, Peck also devised a detailed list of factors to consider in assessing the psychology of elderly people.

For Jaques (1965), life review starts in midlife. It is sparked by recognition of the inevitability of death, and of

the no-longer-deniable hate and destructiveness in all humans:

> The misery and despair of suffering and chaos unconsciously brought about by oneself are encountered and must be surmounted for life to be endured and for creativity to continue. (p. 505)

Accomodation of the realities of death and human destructiveness engenders a tragic, reflective, and philosophic perspective in the individual, a view recalling Erikson's idea that integration entails some realistic disdain and disgust for life. Jaques added that if a person is to accept death and human destructiveness with constructive resignation, he or she needs good inner objects. Without such supports, "...death...is equated with ...depressive chaos, confusion, and persecution..." (p. 511).

More than anyone, however, Butler (1963), drawing on Erikson, elaborated what 'life review' meant. He posited that this is a "naturally occurring, universal" (p. 66) phenomenon, where unresolved conflicts resurface and are addressed. The elderly person cannot so easily evade reflection through work and other preoccupations. Butler portrayed life review as an active, not necessarily orderly process, occurring more or less consciously, with varying degrees of emotion, which might or might not be completed

before the end of life. He quoted one elderly woman who said,

> Some nights when I can't sleep, I think of the difference between what I'd hoped for when I was young and what I have now and what I am. (From Life magazine, 1959, cited in Butler, 1963).

And a 76-year-old man:

> My life is in the background of my mind much of the time; it cannot be any other way. Thoughts of the past play upon me; sometimes I play with them, encourage and savor them; at other times I dismiss them. (p. 70)

Butler saw that some interviewees did not introspect, and instead presented illusory, all-good versions of their pasts. Some used preoccupation with the past to avoid contemplating the future, while others continued to be as detached and uncommitted as they had always been. For these people, self-preservation rather than self-examination, and maintenance of sameness rather than transformation, were the main goals. Nevertheless, Butler believed that the self-transformative life review was an expectable, typical process.

However, a number of empirical studies exploring the phenomenon of life review have called these hypotheses into question. Findings have not supported the idea that many people pass through a transformative, self-revealing self-assessment. It appears that, instead, the key goal for most elderly people may be to hold on to selfsameness.

Few of the aged subjects whose reminiscences have been studied through open-ended interviews have been engaged in an identifiable life review process (Romaniuk, 1978; Coleman, 1974; Fallot, 1977; McMahon and Rhudick, 1964; Postema, 1970; Lieberman and Tobin, 1983). Findings are inconsistent as to whether reminiscing is associated with positive or negative affect, or good or poor adjustment, although one consistent observation is that those who are avoidant or conflictual in reminiscing style are generally unhappier (McMahon and Rhudick, 1964; Lieberman and Falk, 1971; Havighurst and Glasser, 1972; Coleman, 1974; Boylin, Gordon, and Nehrke, 1976; Oliveira, 1977; Lieberman and Tobin, 1983). In one study of eighth-stage ego integrity, Walaskay, Whitbourne, and Nehrke (1983-84) noted that 10 of 20 elderly subjects adults rated Integrity Achieved had never engaged in significant reminiscence. These studies propose cumulatively, then, that the life review process discussed by Erikson and Butler does not describe what investigators usually observe in talking with aged subjects about their lives. Subjects vary considerably in introspectiveness; many simply do not address the question of the existential meaningfulness of their lives. Studying a population of elderly people undergoing the stress of moving into a care home, Lieberman and Falk (1971) wrote,

> Scores on reminiscence indices were found to be unrelated to subsequent adaptation or non-adaptation to stress. The uniformly negative

> findings on this point suggest that the adaptive function of reminiscence activity is questionable...our measures of how the respondent worked with his memories and of how important they were to him yielded little evidence that reminiscence phenomena were related to other measures of psychological well-being,...theories about reminiscence need re-examination. (pp. 138-140)

Revere and Tobin (1980-81) found that many elderly subjects reminisced at length without achieving self-acceptance. Yet, while few investigators have found subjects engaging in recognizably Eriksonian life reviews, a number have found that reminiscing can serve other functions. It can bring the reminiscer attention, permit him or her to offer something to others in social exchange, and allow him or her to teach lessons or pass on traditions through storytelling (McMahon and Rhudick, 1964; Coleman, 1974; Lieberman and Tobin, 1983; Watt and Wong, 1988). The aged can defend against the encroachments of the present and future by glorifying the past (McMahon and Rhudick, 1964; Lewis, 1971).

Romaniuk and Romaniuk (1981) noted that most studies of reminiscence had examined only remembering of an outer-directed, conversational kind. In their study of 91 well-educated, mostly female seniors, 78% said they thought about the past much more than they talked about it. Through factor analyses, the authors identified three main purposes for thinking about the past: Self Regard/Image Enhancement, Present Problem Solving, and Existential/Self Understanding,

which their subjects cited in that order of frequency. Twenty-four per cent reminisced often, 34% occasionally; yet at the same time, 81% said they had reviewed their lives to at least some degree. Private life review apparently was often part of reminiscence. Life Reviewing and Changes/Threats to Body were most often the spurs to the Existential/Self Understanding style of reminiscence; overall, the most common spurs to remembering were the deaths of others and thoughts of one's accomplishments.

In brief, Romaniuk and Romaniuk (1981) reported that Existential/Self Understanding was the least typical purpose for reminiscence, accounting for 13% of all reminiscing variance; Self Regard/Image Enhancement, the most common purpose, accounted for 18%. Life review was usual, but was more a quiet ongoing process than a major preoccupation. The life reviewing process was not in itself explored.

The authors devised their Reminiscence Uses and Reminiscence Triggers Scales intuitively, drawing on developmental literature, and these scales were not validated. It is confusing in this study that life review is considered a stimulus to the Existential/Self Understanding form of reminiscing, rather than being its own type of remembering, which itself might be provoked by things like Changes/Threat to Body. 'Cognitive restructuring concerning one's own mortality' was also examined as a trigger to reminiscing, yet such restructuring could easily overlap

with life review. (In any case, such cognitive restructuring was of all the triggers least often a spark to memory).

One may doubt the Scales given here, which guided the responses about reminiscing with preset options and may have induced socially desirable responding; Tesch (1985) found that womens' responses to an Integrity questionnaire devised by Boylin, Gordon and Nehrke (1976) were highly coloured by social desirability. The subjects in Romaniuk and Romaniuk (1981) also had an average 15 years of education, which could mean an atypically philosophical awareness.

Romaniuk and Romaniuk may still have an important point in distinguishing between conversational and inner life reviewing; life reviewing may be a widespread inner process which other researchers have missed. However, David (1990), surveying the reminiscence literature and citing three earlier reviews of this literature, concurs with the majority of writers who fail to find strong evidence to show that life reviewing of the Erikson/Butler kind often does take place.

More than any other, the motive observers have perceived in aged subjects when they reminisce is that it appears to provide comfort and support by helping them create a sense of consistency from past to present--the sense that one is still the person one has always been. Such a sense of self-continuity is held to be crucial for "psychological survival" (Lieberman and Tobin, 1983, p. 51) in old age because it permits one to feel that one remains

in charge of one's life; without this feeling, life loses its value. Reminiscing in the service of maintaining the self is not life reviewing in the Eriksonian sense; it is neither introspective or exploratory; it is the sustenance of a meaningful self-story which supports the picture of the self who is adequately in control of life.

In a series of studies spanning a dozen years, Lieberman, Tobin and associates researched adaptive processes in over 800 elderly people. Of these, a full five-eighths were long-term psychiatric patients, while the remainder were normal community residents. Eighty per cent of the sample were entering care facilities, from hospitals or from private homes, and 20% were carefully matched age controls from the community still living independently; these studies were focussed on the adaptational processes involved in relocating. Measures included cognitive, personality and coping indices, the latter based on interviews and projective tests. Personal resources of all kinds were assessed. Despite the fact that many subjects were long-hospitalized psychiatric patients, the authors present their conclusions about adaptations in both groups side by side. About 160 of the relocating subjects were community residents; findings concerning them, at least, may reasonably be seen as representative for the observations following.

These studies are summarized and discussed in The Experience of Old Age (1983); in this work, Lieberman and

Tobin persuasively question the Eriksonian idea of life review and build instead a case for self-consistency, rather than personal growth or self-reconciliation, as the main concern of the aging person.

Lieberman and Tobin found that few subjects dreaded, evaded or denied the fact of death; rather, their discussions of the topic were calm and noneuphemistic. This observation, also reported elsewhere (Klein, 1972; Roberts, Kimsey, and Logan, 1970; Kalish, 1976; Kalish and Reynolds, 1976; Kaufman, 1986; Reker, Peacock, and Wong, 1987) contradicted the idea that the nearness of death often engenders internal conflict. Echoing Buhler and Massarik (1968), Munnichs (1966), Neugarten and Datan (1974) and others, the authors hypothesized that death is a more disturbing concept to the middle aged than it is to the elderly. They suggest that old age is a time when questions of identity have been settled, or at any rate, put to one side. What matters more to the elderly is the sense that the self is still in charge.

Lieberman and Tobin (1983) said that subjects steadily withdrew from life as their external environments became less manageable. Subjects were attempting to preserve a feeling of intactness while facing the end of life, the changing of roles, the decline of the body, and the losses of important people, as well as relocation to care homes. Withdrawal from the outer world was not counterbalanced by an increase in introspection; subjects withdrew just as much

from introspection, moving more and more toward general simplification in their lives. Simplification did not necessarily lead to wisdom, and wisdom was not its goal; nor did simplification entail life review.

The authors note that younger people have many more opportunities to maintain the self through social interaction than the elderly do. When activities and relationships that formerly nourished the sense of self dissipate, the aged turn to memory to sustain the idea of the self. In doing this, Lieberman and Tobin's subjects selected themes from, and versions of, their own histories which supported portrayals of themselves as having always been the reasonably coping person they wanted to be today. In creating such portrayals, they selected illustrative anecdotes from memory, and a substantial minority engaged in what the authors called 'mythmaking.'

Six rating scales per subject were used in analyzing the life histories to assess degrees of myth creation and dramatization of the past. These focused on strategies for dealing with loss and threat, mechanisms used to sustain a coherent, consistent self-image, and reminiscence styles, which revealed the use of the past to create a useful image of the self for the present. While the level of mythmaking varied from subject to subject, its purpose was always the same: To create a story in which the teller was the successful centre of an unfolding drama, coping as well today as ever. Impulses and thoughts which were formerly

ego-dystonic now became acceptable, if they added to this portrayal. People who had resisted relocation to a care setting now portrayed this as something they had wanted; in general, "[subjects'] sense of control or perception of control was greater than any external view of the situation" (p. 165).

The authors posit that a wish to preserve control through the creation of a consistent self-image is adaptive. Some subjects went to extremes in doctoring memory and they adapted badly to care settings, but most were successful in sustaining psychological equilibrium through the move. Mythmaking was maladaptive only when it was excessive.

Indeed, those who responded best to stress, and lived longest, exhibited aggressive, irritating, demanding, and narcissistic traits, a finding also reported elsewhere (Sealey, 1965; Gutmann, 1971a; Kleban, Lawton, Brody, and Moss, 1975). Such persons stay focused on their own needs, repudiating losses (Bromley, 1978). Gutmann (1977) suggests that they enter the paranoid position, magically externalizing death and making it an enemy. Acceptance of death would place them in the depressive position. These individuals, who would probably not qualify as integrated in Eriksonian terms, show how the simplified, narrow, externally-focused self may support homeostasis in old age. Maturity, psychic survival, and physical survival are all separate issues.

Having said all this, however, Lieberman and Tobin did identify three subgroups of subjects within their study population whose behavior was somewhat Eriksonian. Some of these were engaged in 'flight from the past,' some were in 'active life review,' and some had achieved 'resolution.' Subjects in 'flight from the past' had low emotional reactivity, articulated themselves poorly in talking over the past, and had few clear thoughts about the future. They tended to give neutral, flattened evaluations of their histories; their evasion of memory suggested non-reconciliation.

Those involved in 'life review' made complex and articulate remarks about their pasts; affect while doing so tended to be strong and negative. The subjects called 'resolved' evaluated their lives positively, without much affect, and seemed serene. However, the maturity of the resolved subjects did not translate into greater adaptiveness; these persons were no more successful than the others at coping with relocation to a care home.

Lieberman and Tobin emphasize that the impressions made by these subgroups were vastly overshadowed by the prevalence of the 'maintaining continuity' pattern:

> Overall, we must conclude that the notion of the life review as a major dynamic of the last phase of life was not supported by our findings (p. 292).

Evidence that some subjects were engaged in life review was "subtle,"

> ...and from the measurement point of view, it is difficult to specify the exact nature of work on past conflicts. (p. 304)

The authors argue that the Eriksonian life review is an invention of the young, a product of psychotherapeutic work with privileged clients, or of self-exploration in certain exceptional artists, a view echoed elsewhere (Lowenthal, Thurnher, and Chiriboga, 1975; Kaufman, 1986). Further, they cite some longitudinal research indicating that the self-concept is generally stable throughout adulthood (Haan and Day, 1974; Haan, 1976), in this way proposing that their elderly subjects were simply continuing in lifelong patterns. Lastly, they add that their findings about the importance of maintaining a consistent self-image can be linked to ideas from self psychology about the importance of regulating self-esteem; self psychology may provide a better-fitting framework than Erikson's for understanding personality in the aged. Perhaps the regulation of self-esteem, a central issue for persons with self disorders (Kohut, 1971), is also a central concern for old people.

It may be questioned whether findings from a population of elderly who were entering care settings are generalizable. In titling their book <u>The Experience of Old Age,</u> Lieberman and Tobin are saying that studying the elderly under stress is a good way to examine the limits of

their adaptive styles and resources. They suggest that the larger commonalities which they uncovered between the relocating seniors, however disadvantaged, and the community controls, are the findings most deserving of attention. Because of the size and variegation of their sample, the thoroughness of their assessment procedures, and because the conclusions mentioned above harmonize with those from other researchers, (Reichard, Livson, and Peterson, 1962; Neugarten, 1968, 1972, 1977; Neugarten et al. 1964; Kuhlen, 1968; Keifer, 1974; Lowenthal, Thurnher, and Chiriboga, 1975; Becker, 1980; Kaufman, 1986) it appears plausible that their findings are generalizable.

The claim that the aged concern themselves most of all with preserving the self is not new. Many studies, including a group of influential reports by Neugarten et al. (1964), based on 88 Kansas City subjects, have produced similar conclusions. In the Kansas City studies, forty-five personality variables were studied through clinical, structured, and open-ended interviews of three to nine hours each, these including projective measures. The interviews, examining life satisfaction and life adjustment in middle and old age, were repeated at intervals over five years (Neugarten, Crotty, and Tobin, 1964).

Neugarten et al. (1964) reported, as have others, that starting with middle age, adults begin to think about their lives in terms of time-left-to-live rather than time-since-birth (Eissler, 1955; Marshall, 1975; Munnichs, 1966; Sill,

1980; Neugarten and Datan, 1974). As this outlook became more natural to their subjects, it was accompanied by a move toward increasing interiority and self-simplification. (Jung [1933], and Buhler [1935, 1968], also observed that the second half of life provokes increasing inwardness). Subjects began to focus more on core values and habits, and to withdraw from things and people extraneous to an ever more streamlined set of concerns. They became less interested in new undertakings, and role activity lessened in each successive age group.

Interpreting TAT responses, Neugarten et al. (1964) and Gutmann (1964) said that, with age, subjects had increasing difficulty in managing their inner lives. The older the subjects, the more their responses showed illogical thought and motivated misperceptions of test stimuli. The researchers reported a steady change from an orientation toward active mastery in early middle age (40-54), toward passive mastery in late middle age and early retirement years (54-70), and then to magical mastery in the oldest subjects (70 and older). Active mastery is the orientation of young and middle aged adults who are maintaining the world; passive mastery means maintaining control through interpersonal submissiveness, selective avoidance, and philosophical resignation. In old age, magical mastery centers on an increasingly self-constructed, partly fantasy-based vision of life; denial and projection are the most-used defenses.

Neugarten et al. (1964) noted that aged subjects in earlier studies (Pearce and Newton, 1963) had shown related characteristics, such as increased eccentricity, stereotyped attitudes, flattened affect, energy conservation, and stimulus avoidance.

Gutmann (1969, 1977) interviewed male Mayan Indians in Mexico, Navajo Indians in Arizona, and Galilean Druze in Israel, and reported that the movement from active to passive to magical mastery obtained in each of those cultures. A four-year followup of the Navajo men confirmed that the expected changes were taking place in each age group with time, which indicated that these trends could be revealing more than cohort effects.

When pressed by the stresses of relocation, Lieberman and Tobin's subjects also withdrew to simplified outlooks. Neugarten (1977) further pointed out that memory may be restructured as part of the ongoing, self-preserving reorganization of experience, which recalls that Lieberman and Tobin's subjects engaged in varying degrees of 'mythmaking' about their pasts. In intensive interviews with men followed from college years to middle age, Vaillant (1977) also observed that often the past had been revised to fit subjects' present situations more closely.

Buhler (1935; Buhler and Massarik, 1968) said that upholding inner order was one of the prevailing goals of adults as they aged. Zinberg and Kaufman (1963) observed that regressions in service of the ego become more common in

old age, as did Lowenthal, Thurnher, and Chiriboga (1975), who published an in-depth study of four age groups undergoing life-stage transitions, including a group entering retirement. They noted that relatively simpler, rather than complex, old people were best adjusted, and that the sense of being in control was the most salient, for all subjects, of four major dimensions of attitudes to life transitions. There was an age-linked trend toward self-protectiveness; the elderly subjects with highest morale were the most self-protective and hedonistic.

Kaufman (1986) and Bengtson, Dowd, Smith and Inkeles (1975) found that the elderly did not define themselves in any new way because of age, but portrayed themselves in terms of identities they had always had. Kalish and Reynolds (1976) asked young adult, middle aged and elderly groups what they would do if they had only six months left to live; they found, as did Back (1965), that more of the older group said they would not change their life styles in any major way.

The above findings as a group suggest that the term 'interiority' may be imprecise, because it implies introspection, whereas almost no researcher has said that subjects became more inwardly thoughtful with time. 'Simplification' would appear to be the more accurate word. Simplification typically serves the aim of self-protection, rather than self-awareness. These findings imply that old people typically avoid self-examination, perhaps because

introspection implies self-questioning, vulnerability, and the relaxing of defenses.

Indeed, Neugarten and associates (1964) found that subjects' lifestyles changed very little over time, and that "people aged in ways that were consistent with their past histories" (Neugarten, Havighurst, and Tobin, 1968, p. 177; Neugarten, 1972). The perceptions of interiority came from TAT responses which indicated internal losses of mastery and the consequent development of passive and magical mastery orientations. So, subjects simplified and rationalized their outlooks internally as a way of coping, while preserving outer habits in most ways. They were not introspecting, or life reviewing.

Although 'simplification' could imply self-protective egocentricity, it does not necessarily rule out introspection or life review. It could also flow from an age-linked need to mourn lost hopes, dreams, and relationships (Cohler, 1982). However, the above-cited findings indicate that these are not the standard motives.

Kaufman (1986) conducted intensive interviews with 15 elderly persons to investigate how they perceived themselves in old age. They did not see themselves in terms of present age or define themselves in terms of chains of experiences, whether personal- or world-historical; nor did they stress life roles they had played. Instead, they defined themselves in terms of themes, evolved from key notions about the self and supported by selected illustrative stories. Themes are

formed, Kaufman argues, from choices made, limitations faced, cultural values incorporated; they nourish a feeling of continuity for the self through time and are of use in reconciling the differences between ideals, expectations and realities. Her findings echo those of Lieberman and Tobin (1983) concerning mythmaking, and of Neugarten (1977) and Vaillant (1977) about the restructuring of memory. Lieberman and Tobin described

> ...a pattern of relating to the past by creating myth and portraying people and events dramatically ...These people literally create a unique sense of self in historical time (1983, p. 294).

It might be said that creating a "unique sense of self in historical time" is itself a form of life review. However, this activity, as portrayed by these authors, bears small resemblance to the soul-searching, transformative process described by Butler (1963). That process entailed taking inventory of one's history: Scanning it for its most evocative aspects and weaving these into a narrative, which blended factual and archetypal truths. One reexamined the values one lived by, past and present; the meaning of the self was reformulated for a last time, and narrative closure was approached.

In contrast, the seniors interviewed by Lieberman and Tobin, Kaufman and others offered narrow accounts of their lives, in which the history would be cast in terms of very

few constructs: One's unvaryingly loving relations with one's family, the ways one made money (Kaufman, 1986). Such individuals have not grown, and do not introspect in rendering these accounts. They have stayed within the construct systems they acquired in early life.

Kaufman's subjects did continue, in old age, to register new experiences which exemplified their themes. However, the themes themselves did not evolve in philosophic or emotional depth; while their meanings were restated repeatedly, their key assumptions were not questioned. None of Kaufman's subjects formed new themes for old age. Kaufman describes a subject called Millie:

> We recall that family members are devoted, attentive, and always available in Millie's thematic scheme; the worth of all relationships is measured by these qualities. In reality, the children do not always manifest all these traits. Though upset that her children do not meet her standards, Millie does not alter the theme to conform to their actual behavior or discard the theme outright. For it is the *theme*, not the children, which keeps Millie's identity intact. Through it, she is able to view her children as her primary and constant source of affection. This is her reason for living. The theme also provides continuity. In order for Millie to continue perceiving herself as a loving and lovable person, her love for her children cannot falter, for they are the only stable outlet for her own love. Friends and acquaintances in the Home die or move away to hospitals. Staff members and volunteers come and go. But the relationship with

> children is permanent, whether or not they are visible. She can show her love for them in two ways--by honoring the unspoken contract [to love each other], and by conceiving of her children in the ideal thematic framework she has constructed rather than focusing on their actual shortcomings. (p. 155)

(Lieberman and Tobin also noted that subjects "mythicized" their children (1983, p. 206)).

In saying that each subject "literally create[d]...a unique sense of self in historical time" (1983, p. 294), Lieberman and Tobin implied the same thing that Kaufman does with the title of her book on these subjects, The Ageless Self, i.e., that the elderly do not think of themselves first as being old, but as having "timeless" ongoing selves whose stories or themes may, or may not, be periodically re-illustrated by new occurrences. Non-theme-related experiences are of secondary importance; and if fewer theme-linked experiences occur in old age, the person may resort to memory to find theme-supportive anecdotes with which to sustain the idea of the ongoing self. The themes give experience meaningfulness, which in turn provides a sense of coherence in life (Antonovsky, 1979, 1987).

Kaufman's subjects did not take into account the broader sociohistorical perspectives which, for Erikson, make a life review complete. Like Lieberman, Tobin and others (Clayton, 1975), she asks whether perspectives of that kind are truly attained by many people.

These ideas concerning themes could harmonize well with the previous observations about simplification; simplification could mean continual refinement and concentration of the individual's themes.

Other authors (Cohler, 1982) have examined personal themes, though using the conceptually comparable term 'self-narratives.' Essentially the story of the self-concept in action (Epstein, 1973), the self-narrative is the individual's most internally consistent explanation for his or her own life. Kohut (1977) and Basch (1976a, 1976b), writing from the perspective of self psychology, point to the usefulness of a self-narrative for preserving self-consistency, which itself may underpin psychic equilibrium. The autobiographical story gives the individual a feeling of mastery because it renders life explicable. The narrative also creates a framework for titrating sameness versus newness: New experiences occurring outside the boundaries of the self-narrative create unmanageable anxiety.

People prefer dramatic coherence in self-narratives, and formlessness is rejected. The best narratives can also make sense to others and are not simply idiosyncratic. Psychological balance requires the ability to encompass past, present and expected future into a tale which is developing understandably on a subjectively understood time line (Cohler, 1982).

Cohler refers to comparable ideas from psychoanalytic writers interested in self-narratives. For instance, Spence

(1982) maintains that psychotherapy entails the client's piecing together of a narrative which summarizes the crucial data about his or her life history, and, more meaningfully, gives that history a narrative truth.

Cohler further postulates that when middle aged people enter upon the "time-left-to-live" perspective (Neugarten and Datan, 1974), they undergo a psychological transformation as important as those which occur between early and middle childhood, and between adolescence and early adulthood. People who negotiate this passage successfully--who feel like 'survivors'--may be those whom Erikson would call integrated. (This thought recalls Jaques's [1965] idea that individuals must come to terms with death and human destructiveness in middle age).

Indeed, Cohler suggests that to revise one's self-narrative in middle age to accomodate the "time-left-to-live" outlook *is* to undergo an Eriksonian life review. In this way, life review would become part of middle age; when its conflicts were resolved, the person would have achieved integration. Erikson, however, specifies that Integration can only "ripen" in someone who is past middle age and is facing death (1963, p. 289).

Studies of autobiographical memory support some of these hypotheses. Experimental findings suggest that the endless episodes of daily life are coded into self-schemata which encapsulate and summarize them (Csikszentmihalyi and Beattie, 1979). Self-schemata are constructed from biased

selections of autobiographical memories, which come to control attention and memory (Markus, 1977). Like Kaufman's themes, self-narratives are the mixed products of life circumstance and learned expectations. Memories organized through self-schemata are "true" to the self-portrayal contained in the narrative, though they may not always be factually precise (Barclay, 1986, p. 97). In support of these hypotheses, Markus and Sentis (1980) and Rogers (1980) showed that information consistent with the self-concept is remembered more accurately than inconsistent information. McAdams (1982) reported that individuals' most significant memories reflected themes of intimacy and power to the same extent that they stressed those motives in personality assessments.

Cohler further cites authors (Klineberg, 1967; Seton, 1974; Kafka, 1973) who suggest, as does Barclay (1986), that Eriksonian identity formation in late adolescence entails the first major consolidation of the continuing self. Epstein (1973), like Barclay (1986), also suggests that Eriksonian identity amounts to a personal theory constructed (perhaps unknowingly) about oneself. This self-theory helps to maintain self-esteem and manage anxiety. Its effectiveness, as could also be said of the self-narrative, may be partly measured by its usefulness for problem-solving. Epstein (1973) and others have further hypothesized that maintaining this self is a major motivational goal,

even when the self is evaluated negatively (Rosenberg, 1979; Korman, 1970; Lecky, 1945).

Gergen and Gergen (1984) say that self-narratives create meaning and direction in life. They are partly constructed in reference to questions like, "Am I improving? Is my life happier now? Are my abilities declining? Am I maintaining the high standards that I once committed myself to?" (p. 6). Narratives may be altered to reveal stability, improvement, or regression in the person's life. These authors emphasize the social origins of self-narratives, and that they are much maintained through social interaction (see also Cottrell, 1969; Rosenberg, 1979). Glenn (1980) suggests that the strength of a given self-attitude corresponds to the reinforcement strength of the experiences which originally shaped it; Snyder (1981a, 1981b) has published evidence indicating that personal consistencies are bolstered by consistent social networks, constructed by the person in the first place.

Lastly, Ryff (1984), Mortimer, Finch and Kumka (1982), and others have discussed how self-narratives may influence life outcomes as self-fulfilling prophecies (Thomae, 1970; Bandura, 1977; Rodin, 1980).

(Berger and Luckmann (1966) wrote that the person decodes experience in terms of society's symbolic universe, which in turn is born from the symbolic world of the individual. Memories shared and legitimated through

consensus create the institution of social reality; this could be considered the social self-narrative.)

Wong (1989) suggests that research on successful aging in the 1960s emphasized activity versus disengagement, and in the 1970s, locus of control. In the 1980s, personal meaning, which gives coherence to experience (Antonovsky, 1979, 1987), has attracted investigators as an explanation for successful aging.

Overall, these hypotheses about self-narratives support the idea that for most old people, sustaining the known self-image is a central preoccupation. The Eriksonian life review, which implies suspension or deconstruction of the accepted self-narrative, may not be a typical process.

However, from another viewpoint, preservation of the self-narrative may be entirely pertinent to Erikson's concept of integration. That is, Erikson et al. (1986) wrote that integrity provides "the only existential immortality that can be promised" (p. 14). This could be interpreted to mean the same thing Kaufman (1986) meant by "the ageless self" and that Lieberman and Tobin (1983) meant about subjects creating a "unique sense of self in historical time" (p. 294). The simplified, thematic, "ageless" self of the self-narrative might be interpreted to mean the "existentially immortal" self.

This is not merely to say that the presentation of a self-narrative means a person has achieved integration. What about the demanding, narcissistic survivors, the likely

distortions, or the bland tedium of some peoples' self-narratives? Erikson's "immortality" concerns the self which transcends time, the mythic-heroic self. In this light, failures of integration would mean failures of mythology, of theme, of self-narrative; the story would not convince or cohere in sustaining the self, and would not resonate for listeners.

In the end, integration may be held to mean that the self-narrative has convincing, dramatic, depth and resonance.

Erikson (1968) has said that each new psychosocial stage involves an opening phase of crisis, "a crucial period of increased vulnerability and heightened potential" (p. 286). However, Identity research has shown that late-adolescent and early-adult youths need not experience the turbulent, stressful form of the Identity crisis to attain Identity Achievement (Marcia et al. in press). Nor has research on middle aged people supported the universality of the midlife crisis portrayed by Levinson (1978) (Costa and McCrae, 1980b; Vaillant and Milofsky, 1980), although there is evidence that self-esteem, autonomy and competence are at their peaks for many people in middle age (Bengtson, Reedy, and Gordon, 1985). Campbell (1980) reported that most adults do not conceive of their lives as characterized by large, age-related changes. Personality maturation can occur without visible turmoil.

Consequently, it appears probable that life review, the exploration phase of the eighth stage, is similar to the "silent" types of identity and midlife crises. Whitbourne (1985) suggests that the life story of an older person who achieves integration without life reviewing may simply be one in which identity-preserving qualities facilitate adaptation more than memories do. The ego's lifetime resilience and permeability in such a case would be adequate to permit integration without the need for self-examination and grieving.

While periods of exploration may not be sufficiently dramatic in their subjects to be recorded by researchers, such periods may still occur in some people. In any case, their absence in research articles does not preclude the existence of other characteristics associated with Erikson's eighth stage.

Whitbourne (1985) presents a model of life-span coping and adaptation which is based on a concept similar to 'self-narrative,' namely, the 'life-span construct.' This construct encapsulates the subjective construction of the individual's life course. Its contents, including psychological, physical and social self-attributions, and values, come from identity. It evolves in a transactional way with identity, each one influencing the other, and interacts similarly with the social world. The life-span construct organizes cognitive and emotional experience.

Whitbourne's model explores how this construct is actually used for coping and adaptation.

The life-span construct also contains a 'scenario' of the imagined future scripts of a person's life, which is influenced by age norms. This scenario acts as a framework for anticipatory coping. The 'life story,' on the other hand, captures the person's past, whose telling can be subject to simplification. The narration of the life story may also be subject to selective biases which sustain identity and/or preserve self-esteem. Whitbourne and Dannefer (1985-86) reported trials of a projective, open-ended 'life drawing' to study adults' autobiographical conceptions, which supported the usefulness of examining the life-span construct.

As have other authors, Whitbourne cites findings that individuals distort their memories or change their anticipations of the future in ways that facilitate self-esteem. She says, however, that portraying individuals as simply editing perceptions to preserve self-esteem and a static life-span construct is antidevelopmental. Adaptation must include ways of changing the environment, and of changing the life-span construct itself. Coping strategies whose goal is to portray the person as hero

> may temporarily serve [a] purpose, but eventually they must break down because not all events can be transformed through intrapsychic processes alone. (Whitbourne, 1985, p. 610)

Consequently, she examines different ways people may respond to events which contradict the scenario and disrupt the life-span construct.

The current discussion has, to now, examined how for many of the elderly, a narrative which maintains the self as hero may act as a structure for adaptation in retirement years. It is also hypothesized, however, that the depth and resonance of a given person's narrative are the qualities which could reflect the extent of ego integrity attained. Whitbourne's illustrations of different ways in which the life-span construct can mediate problem solving exemplify how assessments of integrity could be made on the basis of the self-narrative.

So, for instance, Whitbourne states that the life-span construct determines the content, level, and timing of personal aspirations. Coping might at some point mean adjustment of these, and if identity is restructured in the process, a better congruence between self and self-ideal may emerge, bringing with it a heightened feeling of competence. This would constitute a mature response to the challenge.

A second way of coping with a scenario-disrupting event would be to edit the telling of the event in a way that changes the future scenario, but does not start any reevaluation of identity or life-span construct. A third way might be for the individual simply to leave the environment, again changing the scenario but not identity.

The point here is that assessment of the life-span construct, or self-narrative, might be useful in the assessment of ego integrity, for those with flexible and mature life-span constructs will "integrate events into their life stories without disortion and...revise their scenarios more in keeping with the events that have occurred rather than in terms of expectations derived from identity through the life-span construct" (Whitbourne, 1985, p. 614). Whitbourne further recommends the use of Costa and McCrae's Openness to Experience scale (1985) in studying life-span constructs, predicting that more openness would mean more flexibility and less distortion or denial in recounting the autobiographical narrative.

Once more, then, aged subjects may not often engage in life review. But this need not mean that eighth-stage processes do not take place or cannot be studied.

Other Theorists of the Lifespan

Other investigators have, like Erikson, tried to outline the expectable stages of personality development in adulthood.

Carl Jung

Jung has given more attention to the psychology of old age than any other major personality theorist (Rychlak, 1981). He started out with the assumption that character development continues all through life, and theorized that

in the second part of the life course, the healthy person expresses the complementary aspects of his or her younger personality. This occurs especially by allowing the opposite-sexed aspects of the personality to emerge. Old age is also a time for increased introversion and the reorganization of value systems. Jung felt it was not, however, a time for looking back, but for examining the present self with all its gathered experiences. Most significant are the comprehensions of opposites in life. Age is a time to synthesize these perceptions, and to keep redressing imbalances in the personality; above all, growth is achieved through continually deepening patterns of disequilibration and reequilibration, which lead to ever higher levels of individuation.

. Beliefs about the afterlife are tools for self-understanding; Jung also saw death as a goal to be worked toward, and not denied (Jung, 1933, 1960; Rychlak, 1981).

Charlotte Buhler

Charlotte Buhler was probably the first writer ever to publish studies of the full lifespan, drawn from reminiscences, biographies, personal documents, and interviews with 400 Viennese citizens in the 1930s (1935, 1959, 1962, 1968). She interpreted life histories in terms of biological and biographical types of life event; she saw four biological, and five biographical phases. Each biographical phase was defined in relation to central life

goals, more or less consciously sustained. The first phase, lasting until about age 15, prefigures determination of the life goals; the second, from 15 to 25, involves movement toward their specification. From 25 to 45 or 50, commitments are made to the goals, now specifically outlined. In the fourth phase, from 45-50 to 60-65, the individual examines his or her success in realizing the goals, and in the fifth, from 65 on, whatever degree of fulfillment achieved is acknowledged; a post-self-determination life sets in with rest and memories. Some of Buhler's subjects in this stage returned to rectifying missing elements in their lives, and some lapsed into despair, but the type of resolution she witnessed most often was resignation.

Buhler also posited five major life tendencies, all present to some degree in all stages, but roughly corresponding to the stages: need-satisfaction; adaptive self-limitation (adjustment); creative expansion; establishment of inner order; and self-fulfillment. Of these, Buhler said that expansion was the most consistent need (Kuhlen, 1968).

Although Erikson never cited Buhler, her work is still referenced in contemporary writings on the lifespan (Pascual-Leone, 1990), and her interviewing methods are still used in lifespan research (Levinson, 1978).

Lawrence Kohlberg

Kohlberg (1969, 1987) is known for his six-stage cognitive-developmental theory of moral growth. However, he has also postulated a seventh stage, which he says is close in character to Erikson's eighth stage (1973a, b). The universal humanism of his postconventional stage six provides only partial answers to the issue of life's meaning; the seventh stage would pose problems like, "Why live?" and "How face death?"

For Kohlberg, these problems will arise in those who have long lived by moral principles and then outgrown them (Clayton and Birren, 1978). Here he echoes Erikson's (1963) statement that the challenges of the eighth stage suit only those who have successfully negotiated the previous stages.

Kohlberg found that in religious and philosophical writers who had addressed these questions, stage seven crises arose from despair, when the finiteness of life from the perspectives of either death or infinity was recognized. Their answers to despair entailed a shift from figure to ground: Resolution of the seventh stage meant adopting a nondualistic, nonegoistic orientation. That is, there is an identification with the cosmic or infinite rather than with the finite, with life at large rather than with one's own existence (Kohlberg, 1973a).

This idea recalls Erikson's "post-narcissistic love of the human ego--not of the self--as an experience which

conveys some world order and spiritual sense" (1963, p. 268).

Kohlberg wrote that this stage could probably not be studied with the structural approach used for his previous stages. As an ontological attitude, the seventh stage should, he suggested, be explored in philosophical terms, the potential benefits being both philosophical and generative (1973a).

Jane Loevinger

In Loevinger's ego-developmental scheme, as in Kohlberg's, the person is increasingly differentiated, and thought continuously more liberated, from contextual limitations (Vaillant and Milofsky, 1980). Her model posits an innate sequence of distinct ego states which emerge in unvarying hierarchical order. There are eight stages with three transitional phases, not formally linked to age periods; some people never move beyond certain stages. An individual's ego level is determined from his or her responses on the Washington University Sentence Completion Test, a 36-item projective measure.

The eight conventionally scored stages are 1) impulsive (I-2), 2) opportunistic (delta), 3) conformist (I-3), 4) conscientious/conformist (I-3/4), 5) conscientious (I-4), 6) individualistic (I-4/5), 7) autonomous (I-5), and 8) integrated (I-6) (Loevinger, 1976).

Other aspects of development, such as the physical, psychosexual, and intellectual, are seen as separate from, though empirically related to, ego development. For Loevinger, the person's efforts to master, to integrate, and to make sense of experience are the essence of the ego (Loevinger, 1969). This is the ego we mean when we allude to character development, interpersonal relations, conscious preoccupations and impulse control (Loevinger, 1966; Vaillant, 1977).

In the highest, 'Integrated' stage (I-6), the person is "proceeding beyond coping with conflicts to reconciliation of conflicting demands, and, where necessary, renunciation of the unattainable" (Loevinger, 1966, p. 200). Individual differences which formerly were tolerated are now prized. This stage, like Kohlberg's seventh, is theoretical, and there is little empirical description of it available; Loevinger and Wessler (1970) estimated that no more than 1% of the population would be scored at this level.

Loevinger's is probably the best designed existing stage scheme for adult personality development, with the most empirically based measure for its assessment (Vaillant and McCullough, 1987; Loevinger, 1984; Loevinger, Cohn, Bonneville, Redmore, Strich, and Sargent, 1985). Vaillant and McCullough (1987) reported that Sentence Completion Ego Levels in middle aged men correlated significantly with their measure of Eriksonian maturity.

Roger Gould

In 1968, Roger Gould started to explore the hypothesis that distinct adult age periods can be characterized in terms of specific preoccupations. Patients at the UCLA Outpatient Psychiatric Clinic were clustered into seven age groups from 16 up; one cotherapist-researcher observed all therapy for each age bracket. Six months later, each investigator moved to a different age group; when problems endemic to all groups, like anxiety and depression, were put aside, the researchers' summaries of each group's major and typical concerns corroborated those of the prior observers in each case. Later, eight untrained medical students identified the same key concerns when blindly presented with each group's session tapes.

Gould then had 524 nonpatients aged 16-50 rank typical age-group remarks from the patient groups for salience to their current lives: For example, "My parents are the cause of many of my problems," "How important are these people to you overall (spouse; self)?" and "It is too late to make any major change in my career" (Gould, 1972). When grouped by age, patients and nonpatients had the same main concerns in living.

Some time later, Gould published a book, Transformations, (1978), amplifying his views on the major concerns of five age periods: 16-22, 22-28, 28-34, 35-45, and Beyond Mid-life. Each phase is described in terms of its major false assumptions; e.g., from 16-22, "I'll always

belong to my parents and believe in their world;" from the 35-45 period, "I am an innocent." Gould also introduced the idea that the late 30s and early 40s can be a chaotic time of self-assessment, when a new awareness of death engenders panic over the achievement of life goals. This 'midlife crisis' was more completely explored by Levinson (1978). Gould's insights on the years after 50 are much less detailed, but certainly draw on Erikson's thoughts about Integrity versus Despair.

Gould's methods and findings were widely disseminated in the bestseller Passages: The Predictable Crises of Adult Life (Sheehy, 1976). Although his contributions were weakened by the absence of statistical analyses and perhaps middle-class bias, they did much to create wider interest in lifespan personality development.

George Vaillant

In 1939-41 and 1942-44, 204 Harvard men were selected for the Grant Study, a longitudinal prospective study of the qualities linked with successful adaptation to life. Subjects were chosen for showing independence, good academic performances, and overall psychological balance.

Around the time of their 25th reunion, at average age 50, Vaillant (1977) interviewed a randomly selected group of 95 of these men. Using traditional psychiatric terminology and drawing on Erikson, he studied ego defense mechanisms as mechanisms for coping and as predictors of success and

failure in adaptation to life. From the findings, he evolved a typology of ego-defensive styles. Most importantly, he concluded that the person's use of ego defenses matures over time, in a way that parallels maturation through Kohlbergian and Eriksonian stages (Vaillant, 1977; Vaillant and McCullough, 1987). In a later study, Vaillant and Milofsky (1980) found that maturity of defensive style was significantly correlated with estimated Eriksonian stage in middle aged men.

In Vaillant's (1977) Grant Study report, intimacy, career consolidation and generativity were the major life tasks of the twenties, thirties and forties. Vaillant observed few men undergoing the midlife crises described by Gould and Levinson, but when they did occur, they typically led to improved adjustment.

Vaillant has not studied aged subjects. In other research, he has worked toward validation of a hierarchical ranking of defense mechanisms (1971; Vaillant, Bond, and Vaillant, 1986) and has continued to clarify the factors predicting adaptive and maladaptive patterns in males (Vaillant and Drake, 1985; Vaillant, 1979). His studies, based mainly on structured interviews, have been more conventionally empirical in approach than those of Buhler, Gould, or Levinson.

Daniel Levinson

Levinson's (1978, 1990) lifespan research initially focused on men's lives, although his methods have since been used to study women's lives (Roberts and Newton, 1987). His first work drew from extensive interviews with 40 blue collar workers, biologists, novelists, and business executives. This research produced several important constructs for studying lifespan change.

To begin, Levinson seeks in any one history the *life structure*, "the underlying pattern or design of a person's life at any given time" (Levinson, 1990, p. 41.) The life structure comprises his or her central relationships, whether with people, activities, or preoccupations; mostly it concerns marriage, family and work.

The life *cycle* has four major eras: Preadulthood, from birth to age 22; early adulthood, from 17 to 45; middle adulthood, from about 40 to 65; and late adulthood, from age 60. Five-year overlapping transitional periods, when the person prepares for the next phase, are interspersed throughout.

Like Buhler, Levinson interprets the individual life course through the filter of the individual's key goals, which, in aggregate, he calls "the dream." The dream permeates the life structure, and defines the meanings of work and relationships; it is the focus of the midlife self-assessment, which for Levinson, as for Gould, is commonly a turbulent period of reevaluation (Levinson, 1986). (Of note

here is the relation of his "dream" construct to the self-narrative; presumably the self-narrative is born from the dream).

Levinson concurs with Erikson that in middle adulthood, the person begins to feel part of the adult world, and wants to contribute generatively to it. He also follows Erikson in stating that the main task of old age is reconciliation with one's life course. However, of all age periods, Levinson has researched senior years least.

Levinson has not used statistical analyses, and his finding that eras and transitional periods can be linked to quite exact ages has provoked skepticism (Levinson, 1990). At minimum, however, his work's richness has advanced lifespan research considerably. The relation of his "dream" construct to the self-narrative is particularly interesting.

Overview of previous studies on psychosocial stages

The following reviews the work of researchers who have studied individual stages in seeking validation for Erikson's constructs.

Industry vs. Inferiority

The fourth psychosocial stage pertains to the later years of grade school, when the child develops competencies which eventually will carry him or her beyond the family world. All cultures school children at these ages. Erikson wrote, "To bring a productive situation to completion is an

aim which gradually supersedes the wishes and whims of play" (1963, p. 259). The risk for the child is that she or he will fail to acquire the competencies needed to take a place in the cohort's forward movement, and will internalize a damaging sense of inadequacy.

Kowaz and Marcia (1991) are the only researchers to have attempted construct validation of this stage on its own. They developed a child self-report measure of industry, the Children's Industry Questionnaire; in their research, parent and teacher ratings paralleled childrens' self-ratings on this measure. An observational measure of industry was also devised, and three behavioural and four psychometric measures assisted in establishing convergent validity. Subjects were 187 fourth, fifth, and sixth graders drawn from schools at three different socioeconomic levels. Intelligence and social desirability were controlled as covariates.

Parent, teacher, and child ratings of industry were positively correlated, as were scores on standard achievement tests, grades, and overall industry scores. Industry scores correlated further with the childrens' skills at distinguishing between effort and ability, preferences for reality over fantasy work, and orientations toward the process of work over outcomes. Ratings of work samples and of personal contentment also supported industry ratings. Neither intelligence, social desirability, or

school socioeconomic level altered these relationships (Kowaz and Marcia, 1991).

This pioneering research, then, represents a solid beginning to the validation of industry-stage constructs.

Identity vs. Confusion

Marcia's (1966) status approach is by far the most-researched method for studying ego identity. Identity status research now encompasses more than 150 studies, most using college students for subjects. In the semistructured Ego Identity Status Interview (Marcia, Matteson, Waterman, Archer, and Orlofsky, in press) subjects are interviewed about their beliefs concerning Occupation, Religion, Politics, Sex Roles, and Sexuality. The identity statuses can be differentiated in terms of degrees of mature, internal modes of self-regulation and valuation. The Identity Achieved person has constructed his or her own identity after a period of searching; the person in Moratorium, working toward Achievement, may at times rely on external, other times internal, sources for self-definition. The Foreclosed individual has identified with and internalized authority figures, but unquestioningly, and lacks a clear identity away from the inherited context. Identity Diffusions are uncommitted personalities who often allow their outlooks to be defined by circumstances.

(In the following overview of research findings on the statuses, references are cited only as instances of the work

in each area). Consistent with expectations, then, Foreclosures score higher than Moratoriums on measures of authoritarianism (Matteson, 1974), but lower on anxiety measures than any other status group (Oshman and Manosevitz, 1974). While Achievements typically internalize locus of control, Diffusions find it outside themselves (Marcia and Miller, 1980). Achievements demonstrate more autonomy than the other status groups (Chapman and Nicholls, 1976), and are more resistant to social pressures (Adams, Ryan, Hoffman, Dobson, and Nielsen, 1984). Youths rarely achieve either Moratorium or Achievement before senior year in high school (Archer, 1982), but most who experience an identity crisis in college will move toward Achievement (Waterman, 1982). Higher-identity people perform more effectively in academic settings (Waterman and Waterman, 1970), and in one study, academic departments stressing social awareness fostered more identity growth than those which did not (Adams and Fitch, 1983). Foreclosures marry more often while in school (Lutes, 1981). Identity status ratings are independent of intelligence (Schenkel, 1975). More Achievements were found among age-matched groups of working youths than among college youths (Munro and Adams, 1977).

While Diffusions are extremely cognitively complex, Foreclosures are comparatively simple; Achievements and Moratoriums are moderately complex (Marcia et al., in press). Scores on Loevinger's measure of ego development have consistently correlated with Identity status ratings

(Newman, 1986). Moratoriums and Achievements score highest on Kohlbergian measures of moral development (Rowe and Marcia, 1980). Achievements are consistently judged to have resolved more previous Eriksonian stages than the other statuses (Waterman, 1982). Research on earliest memories shows that Foreclosures and Diffusions are most "hindered by lack of resolution...of basic issues of nurturance and security" (Orlofsky and Frank, 1986, p. 20; Kroger, 1990a). In studies of family dynamics, the families of Achievement subjects are the most differentiated (Grotevant and Cooper, 1985).

Mallory (1989), comparing the Q-sorts of Berkeley Guidance and Oakland Growth subjects (Block, 1971) to prototypical Q-sorts designed for each status by experts, found that women subjects were especially influenced by prevailing sex role attitudes; in this way, the number of Foreclosures increased 1930-50, while Moratoriums increased in 1968. O'Connell (1976) noted higher identity statuses in non-traditional women; Kroger (1986a) found increases in identity achievement with age in adult women.

A number of studies indicate that women focus more on the interpersonal areas of identity, men on the occupational, religious, and political areas; also, that identity formation is more complex for women because of their greater awareness of the several aspects of identity, and because femaleness carries less social validity than maleness (Mellor, 1989; Archer, 1989; Josselson, 1988).

Androgyny is more closely linked with Identity Achievement than sex-typed attitudes (Marcia et al., in press).

Nearly twenty studies have supported the meanings of Identity Achievement and Diffusion across various international cultures; they have also shown that the Foreclosure position has fluctuating degrees of adaptive value across the world (Mohammed, 1990; Marcia et al., in press).

Of several alternate measures of ego identity, which do not include statuses, the Ego Identity Scale (EIS) developed by Tan, Kendis, Fine, and Porac (1977) has the strongest psychometric qualities. Of questionnaire measures attempting to assess statuses, the Objective Measure of Ego Identity Status (OM-EIS) (Adams, Bennion, and Huh, 1987) holds most promise (Marcia et al., in press). A number of researchers have contributed work which examines the *process* of identity development: For instance, Matteson (1977a) used separate scales for exploration and commitment while studying identity development in Danish students.

Research continues in, for example, the areas of cognitive development (Boyes and Chandler, 1992), ethnic differences (Watson and Protinsky, 1991) and interventions based on the identity status model (Marcia, 1989b). In all, this body of research gives substantial validity to Erikson's ego identity constructs and Marcia's identity statuses.

Intimacy vs. Isolation

Intimacy entails committing to definite partnerships for the long term; the person commits to the longterm idea despite sacrifices. Resolution of this stage means that one can be open, can trust, and can experience fusion or self-abandon without fear of losing one's own boundaries; such relationships may be formed with any number of other people and with the self. Isolation means withdrawal from communal life as well as from partnerships (Erikson, 1963).

Orlofsky and associates (Orlofsky, Marcia, and Lesser, 1973; Orlofsky, 1974) postulated five Intimacy statuses, and since then two more have been proposed (Levitz-Jones and Orlofsky, 1985). Researchers rate friendships, serious love relationships, and the depth and quality of these connections through a semistructured interview. The five statuses first developed are: Intimate: This person has deep friendships with people of both sexes, and an enduring bond with a love partner. The Preintimate person has peer relationships like those of the Intimate person, but is ambivalent about entering a major love partnership. A Pseudointimate person is involved in a major relationship, but it lacks emotional resonance. A person in Stereotyped Relationships has only conventional and superficial connections to friends, while the Isolate experiences only occasional encounters with acquaintances.

Inter-rater reliabilities in eight studies have adequately supported this classification system (Orlofsky,

in Marcia et al., in press). In the first validity studies, scores on earlier, simpler measures of Eriksonian maturity (Yufit, 1956; Constantinople, 1969) correlated in the desired ways with Intimacy statuses (Orlofsky et al., 1973; Orlofsky, 1974). Intimacy statuses further correlated with partners' abilities to predict each others' responses on a personality and attitude inventory (Orlofsky, 1976). Zampich (1980) reported that more Intimate people scored higher on a self-disclosure questionnaire; Orlofsky and Ginsburg (1981) found high-Intimates were more skilled than low-Intimates at comprehending and expressing their feelings. Orlofsky (1978) reported that such persons were more likely to have resolved previous psychosocial stages successfully, and other authors (e.g. Hodgson and Fischer, 1979; Kacerguis and Adams, 1980; Whitbourne and Tesch, 1985) observed that people higher in Identity status were also higher in Intimacy statuses.

However, this finding applied more clearly to men than to women, and women also tended to be higher-Intimate than men (see also Scheidel and Marcia, 1985; Arora and Marcia, 1987). Levitz-Jones and Orlofsky (1985) surmised that some women enter love relationships without having achieved clear Identity boundaries, and proposed two more Intimacy statuses, Merger Committed and Merger Uncommitted. These terms characterize dependent, enmeshed people who sacrifice autonomy to their relationships. On a measure of separation anxiety, Levitz-Jones and Orlofsky (1985) reported that Merger and low-Intimacy college women demonstrated more

disorders of separation-individuation than high-Intimacy women.

Though little has been done since then to extend research on Intimacy, the above investigations comprise a strong start toward validation of the sixth-stage constructs.

Generativity vs. Stagnation

Erikson's seventh stage concerns the adult's willingness to participate in the cultivation of his or her social group, through procreation, work productivity or both. The generative person wants to be part of sustaining trends in the life of his or her culture and to nurture growth in its youth. This stage's vital strength (Erikson et al., 1986) is 'care,' the opposite being 'rejectivity,' negating the world and self as useless. (Rejectivity is the counterpart to eighth-stage disdain). Generativity's opposite, stagnation, entails solipsism, impoverished relationships, and a feeling that one's life has no point.

Bradley (1992), like Marcia, Orlofsky, and the present author, used a semi-structured interview and the status approach in seeking to establish validity for Erikson's constructs. She postulates five statuses for this stage, differentiated along continua of "(a) vital involvement, or active concern for the growth of the self and others, and (b) an individual's tolerance of different ideas,

traditions, and values, which, by extension, determines the scope of caregiving concern" (1992, p. iii).

Individuals rated Generative are high in vital involvement and tolerance for self and others. The second status is the Pseudogenerative-Agentic; these individuals are high in vital involvement and tolerance for self, but not for others. Pseudogenerative-Communal describes those high in vital involvement and tolerance for others, but not for self. People of Conventional status are high in vital involvement for self and others, but low in tolerance generally. Stagnant persons show little vital involvement or tolerance overall.

Bradley (1992) used both dimensional and categorical judgements in assigning statuses; dimensional scalings provided higher reliabilities, and these reached acceptable levels. Two questionnaire measures of generativity, the Loyola Generativity Scale (McAdams and de St. Aubin, 1992), and the generativity subscale of the Ochse and Plug Erikson Scale (1986), provided convergent validity in that persons rated Generative and Stagnant scored highest and lowest, respectively, on these scales. Intermediate statuses scored higher than Stagnant on one or other of these scales. Subjects rated Generative and Conventional scored significantly higher than Stagnant subjects on the full Ochse and Plug Erikson Scale (1986), which measures overall psychosocial adjustment. Lastly, Generative and Conventional subjects were distinguishable on the NEO Openness to

Experience and Openness to Values scales (Costa and McCrae, 1985).

It is of note here that the Loyola Generativity Scale (McAdams and de St. Aubin, 1992) is a pencil-and-paper measure being validated using various kinds of convergent measures, including the California Personality Inventory, a generativity behavior checklist, and ratings of life satisfaction. The authors have also used "the individual's personal narration of generativity as this impacts self-definition" (Bradley, 1992, p. 22).

Other approaches to psychosocial research

A number of investigators have published questionnaires measuring development on some or all, rather than on individual, psychosocial stages. They include Rasmussen (1964), Constantinople (1969), McLain (1975), Rosenthal, Gurney and Moore (1984), Hawley (1984), Ochse and Plug (1986), Darling-Fisher and Kline Leidy (1988) and Domino and Affonso (1990). Viney and Tych (1985) devised a method for gauging the individual's development through content analysis of verbal responses to statements representing each stage, e.g., "I accept and am content with my life" (Integrity; Viney and Tych, 1985, p. 312). Although each of these multistage measures has established some psychometric validity, however, only Viney and Tych's method has been validated on children as young as six, and no investigators have studied infants, despite the fact that Erikson's first

four stages pertain to preadolescence (Hawley's (1984) study included preteens in the validation sample). In addition, the problems of obtaining reliable and valid stage-distinct scores on multi-stage measures are persistent. On their Inventory of Psychosocial Balance, for example, Domino and Affonso (1990) did not obtain all the expected age progressions in overall scores between adolescent, young adult, middle adult, and elderly groups. Darling-Fisher and Kline Leidy (1988) found unexpectedly high correlations between the generativity and identity, and the trust and integrity subscales of their measure. Ochse and Plug (1986) observed a large general factor underlying their seven-stage measure in a large group of subjects aged 15 to 60, which may represent ongoing psychosocial development (Bradley, 1992).

Creating a multi-stage measure which reliably distinguishes each stage for its expected age group calls for specification of those age brackets, but such specifications may become problematic. For instance, Domino and Affonso (1990) validated their Identity subscale on adolescents aged 15 to 18 and their Intimacy subscale on subjects 20 to 25, yet Meilman (1979) found only 4% Achievements and no Moratoriums among 15 year olds; in that study, the significant appearance of Identity Achievement and Moratorium began at age 18 and increased to age 24. Raphael and Xelowski (1980) found no high school senior females in the Achievement status (see also Archer, 1982).

Much Identity research has been based on college samples (Waterman, 1982).

Moreover, if the average age of marriage is increasing (Statistics Canada, 1987; Central Statistical Office, United Kingdom, 1992; United Nations Statistical Office, 1990), should this alter the predicted age range for achievement of Intimacy?

It is possible, then, that the interview approach to studying single stages can provide finer-grained data about developmental processes than the numerical scores obtained from questionnaire measures.

Previous studies of Erikson's eighth stage

A number of researchers have published studies on aspects of the eighth stage.

In a well-known early investigation of personality in senior years, Reichard, Livson, and Peterson (1962) interviewed 87 men aged 55-84, half retired and half facing retirement. Three types were well adjusted, two poorly adjusted to aging. The best adapted were the 'mature,' who were non-neurotic, self-accepting, and satisfied in their activities and relationships. This group appeared to be the closest to being integrated. There were secondly the 'rocking-chair men,' who happily adopted passivity, and the 'armored,' who dealt successfully with anxiety over decline by determinedly staying active. In contrast, the 'angry men' were bitter over failures and disappointments, and blamed

others; 'self-haters' blamed themselves. It is of note that although they had not achieved the philosophical goals characteristic of Erikson's integrated person, the 'passive' and 'armored' men were happy.

Neugarten, Havighurst, and Tobin (1968) described four adjustment types in summarizing their assessments of Kansas City late adults. The Integrated type had

> ...a complex inner life and at the same time, intact cognitive abilities and competent egos. These persons are acceptant of impulse life, over which they maintain a comfortable degree of control; they are flexible, open to new stimuli; mellow, mature...high in life satisfaction (p. 174).

By contrast, the Armored-Defended type either held on to long-maintained lifestyles or gradually constricted life more and more. The Passive-Dependent type were succorance-seeking or apathetic, while the Unintegrated were disorganized, with deteriorating cognitive processes, poor emotional control and low life satisfaction. The first and fourth types here, at least, recall Erikson's Integrated and Despairing types.

The findings of these two early reports, whose authors were aware of Erikson's writings, were reasonably supportive of his scheme (Woods and Witte, 1981). Many years passed, however, before any studies emerged which tried to validate eighth stage constructs specifically.

Boylin, Gordon and Nehrke (1976) examined integrity and reminiscence (which they equated with life review) in 41 veterans in their 50s and older. Generativity and Integrity subscales were devised in the format of Constantinople's (1969) measure of the first six stages, although the new subscales were unvalidated; subjects' scores later showed that four of ten Integrity items correlated weakly with that scale. Integrity scores were correlated with frequency of reminiscing, and negative affect in doing so. Perhaps these subjects scored highest on Integrity because of a willingness to tolerate regrets; still, life review should entail both negative and positive remembrances. Because this small, single-sex sample was studied with uncertain instruments, results were hard to interpret.

Nehrke, Bellucci, and Gabriel (1977-78) hypothesized that individuals scoring high on life satisfaction and internal locus of control, and low on death anxiety, might be regarded as integrated. Subjects were 120 men and women 60 and older. In fact, three patterns emerged, associated with various housing settings. The scores of public housing residents fit the proposed profile. Subjects in nursing homes, by contrast, who were most external in locus of control and had least life satisfaction, had least death anxiety; while subjects living independently in the community, who were youngest and most educated, with the most life satisfaction and internal control, had greatest death anxiety. The authors conjectured that community

residents had most, and nursing home residents least, to live for, which would explain the death anxiety scores of the two groups. Public housing residents may have scored low in death anxiety because their living setting permitted a communal sharing process in confronting death, while they kept an independence in living that nursing home residents lacked. These interpretations, however, remain speculative.

Walaskay, Whitbourne, and Nehrke (1983-84) proposed that Marcia's (1966) identity statuses could be used in studying elderly people facing the integrity crisis. Forty elderly subjects were rated with an Ego Integrity Status Interview and manual devised by Walaskay, along the two dimensions underlying identity status ratings: Degree of crisis and style of commitment on integrity issues. The new statuses were integrity/identity achieved, moratorium integrity/identity, foreclosed integrity/identity, and diffuse-despairing integrity/ identity. For reliability, ten subjects were co-rated by Whitbourne, with an .80 level of agreement. Convergent measures included items from Chappell's awareness of finitude measure (Chappell, 1975), the measures of reminiscence frequency and affect used in Boylin et al. (1976), and the Affect Balance Scale (Bradburn and Caplovitz, 1965), a measure of psychological well-being. The researchers also gave the Death Anxiety Scale (Templer, 1970) and a self-created Death Preparation Scale. Intimacy, Generativity and Integrity were measured again by the scales used in the Boylin et al., (1976) study.

Subjects rated integrity achieved through the Interview scored more positively than despairing subjects on all convergent measures, except frequency of reminiscing. However, those rated foreclosed differed from the achieved only on the Integrity questionnaire subscale. The authors speculated that these individuals unwittingly resolved the crisis and denied the process. Moratorium, or 'dissonant,' subjects felt more well-being and had resolved Integrity more successfully than despairing subjects. However, they felt death anxiety as much, and had resolved Generativity as poorly, as the despairing subjects.

The Ego Integrity Status Interview and convergent instruments successfully separated integrated and despairing subjects, and identified the intermediate statuses somewhat less successfully. This Interview has not appeared in later publications; the Integrity and Generativity subscales added to Constantinople's (1969) measure remain unvalidated. Despite its small sample size, this study introduced the status approach to integrity research, and the content areas explored in the Ego Integrity Status interview are very like those raised in the Self Examination Interview developed for the present study.

Tesch (1985) explored the internal consistency and construct validity of the expanded version of Constantinople's (1969) Inventory of Psychosocial Development (E-IPD), including the Generativity and Integrity scales created by Boylin et al. (1976). E-IPD

scores were studied in relation to the Life Satisfaction Index A (Neugarten, Havighurst, and Tobin, 1961), the Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe, 1960), age and socioeconomic status. Subjects were 74 adults aged 22-67.

When variance due to social status, social desirability, and age was removed, E-IPD scores accounted for only 21% of the variance in life satisfaction. Two of ten Integrity items correlated nonsignificantly with that scale, and Integrity scores were correlated with Marlowe-Crowne scores for women. For men, life satisfaction was predicted best by social status, and nonsignificantly by psychosocial development, including the Integrity subscale. Modest internal consistencies for all eight scales suggested that each measured more than one construct. Age did not correlate with stage scores, which raised doubt about the E-IPD's capacity to trace developmental shifts. Alternatively, resolution of the various stage conflicts may not be strictly age-linked. Tesch concludes that while the E-IPD was supported as a measure of general adaptation, a measure which explores the crisis phase as well as the resolution of each separate stage is required, and cites Marcia's (1966) Identity Status Interview as one such measure.

Taft and Nehrke (1990) explored the connections between different styles of reminiscing and E-IPD scores in 30 nursing home residents. Citing three uses of reminiscence identified by Romaniuk and Romaniuk (1981)--teaching and

entertaining, problem solving, and life reviewing--and employing the Reminscence Uses Scale devised by the Romaniuks, they found two-thirds of the subjects were life reviewing when they reminisced. Further, E-IPD Integrity scores correlated with life reviewing. The authors recommend research into whether integrity is possible without life review, and into the relative timing of life review and ego integrity across the life-span.

Once again, findings are limited by the psychometric weaknesses of the E-IPD. Further, the many uncertainties and variabilities in research on reminiscing and life review (David, 1990) render the reminiscence findings in this study questionable and in need of much replication before they can be accepted at face value.

In general, because of small samples of varying makeup, uncertain measures, and speculative conclusions, the five investigations just discussed have added less than they might have to the study of integrity.

Woods and Witte (1981) operationalized 'ego integrity' to mean higher scores on the Life Satisfaction Index-A (Neugarten, Havighurst, and Tobin, 1961), and lower scores on Templer's (1970) Death Anxiety Scale. They further predicted that elderly subjects scoring higher on the Ego Identity Scale, which assesses the first six stages (Rasmussen, 1964) would score higher on the Life Satisfaction Index and lower on the Death Anxiety Scale. Although ego identity and life satisfaction scores were

correlated as predicted, death anxiety was linked inversely with life satisfaction and ego identity for men only. The authors wondered whether retirement from work, for men, incites an identity crisis which also encompasses questions about autonomy, initiative, and industry. Basically, this study supported Erikson's ideas about the eighth stage. Woods and Witte also suggest that Erikson's scheme could be used as a framework for counselling older adults.

The status approach used in the study to be reported here separates those elderly people who are happy and able to reflect on themselves and their histories from those who are nonreflectively contented. While 'life satisfaction' is clearly part of what 'integrity' means, then, life satisfaction on its own would be too broad a measure for use with the status approach.

Wagner, Lorion and Shipley (1983) noted that in insomnia research, many sleep-disturbed individuals resembled those who had not resolved psychosocial stages. Late adolescent insomniacs, for example, had intellectualized, identity disturbed personality profiles; young adult insomniacs were socially introverted and withdrawn from people, or isolated (Kales, Caldwell, Preston, Healy, and Kales, 1976; Goldstein, Graedon, Willard, Goldstein, and Smith, 1970). Worried preoccupation with physical problems and excessive obsessiveness were common in middle aged insomniacs (Roth, Kramer,and Lutz, 1976; Coursey, Buchsbaum and Frankel, 1975), a state

consistent with Erikson's (1959) description of stagnation in terms of personal impoverishment, self-indulgence, and somatization.

Wagner et al. (1983) hypothesized that elderly persons with sleep disturbances might have resolved the eighth stage less successfully than those who slept well. Seniors with sleep disturbances were predicted to score higher on measures of death anxiety, lower on life satisfaction, lower on attitudes toward aging, and lower on perceived control of events, than those who slept well. These predictions were essentially borne out (as were similar ones regarding adolescent insomniacs and the identity crisis). This well-controlled study provided useful validation of psychosocial constructs.

Ryff (1984) observes that few researchers have inquired whether individuals actually do perceive themselves changing in the ways set out in lifespan schemes like Jung's or Erikson's. Remarking that such subjective evidence could do much to validate lifespan theories--how to use these if no one sees him or herself in them?--she and her associates (Ryff and Baltes, 1976; Ryff, 1982a; Ryff and Heincke, 1983; Ryff and Migdal, 1984; Ryff, 1984) have explored whether

individuals' self-perceived character histories through time are congruent with those predicted by lifespan theorists.

Ryff acknowledges the problems inherent in self-reports with regard to autobiography; yet her phenomenologically-based ideas on memory change the valence of some of these problems:

> For [phenomenologists], the accuracy question [i.e. accuracy of memories] would have little appeal, in part because of the difficulty in defining accurate...but also because of their assumption that the past is continually changed as it is remembered from new presents. (1984, p. 273; see also Whitbourne, 1985)

She further cites Peskin and Livson (1981), who suggest that people recall different personal traits or resources, parts of autobiography, at different times: These are 'discontinuous recoveries' of parts of one's self, selectively recalled for today's uses. Ryff further observes that peoples' ideas of themselves in the future can powerfully influence those futures (Bandura, 1977, 1982; Sears, 1981; Thomae, 1970).

These points on the ways in which people invoke different personal histories at different times have, in essence, to do with the self-narrative. Ryff's research asks whether the schemes of Erikson and others can harmonize with peoples' self-narratives, given their mutability and subjectivity.

In the first of a series of studies, Ryff and Baltes (1976) tested whether values typically shift between middle

and old age, as postulated by Erikson, Jung, Neugarten, and Buhler. They predicted that while middle-aged women would emphasize instrumental values, older women would stress terminal, more universal values on the Rokeach Value Survey (1973); the hypothesis was supported. Additionally, the middle aged women expected to adopt more terminal values when older, while older women recalled being more instrumentally focused in middle age.

Combining further the concepts of Erikson, Buhler, Jung and Neugarten, Ryff (1982a) next assembled a typical profile of the middle aged person: Independent, bold, active, achievement oriented, energetic, controlled, and powerful. Older people were viewed as reflective, philosophical, contemplative, accepting, accomodating, hedonistic, and non-work oriented. Ryff then predicted that middle aged persons would score higher on the achievement, dominance, and social recognition scales of the Personality Research Form (PRF; Jackson, 1967), while older people would score higher on the play scale. Four nondevelopmental PRF scales expected not to show change with time--abasement, defendence, impulsivity, and order--were used for control measures, and the Rokeach Value Survey (1973) was given again, this time to middle aged and elderly men and women.

The value shift finding was replicated in the women but not the men, who preferred terminal values at both ages. Middle aged men did score higher, as predicted, on the achievement/dominance/social recognition scales than on the

play scale, and foresaw themselves inverting these priorities in old age. Old-aged men preferred the play scale and then, responding to the measures as they would have in middle age, reversed these preferences. Womens' scores emerged in the expected directions, but generational differences were nonsignificant. There were no age changes on the control scales.

Although these findings tended to be encouraging, the play scale fails to capture Erikson's ideas about integrity.

Ryff and Heincke (1983) continued to ask subjects for recalled, current and prospective self-ratings; they also asked questions about perceived personality changes which more precisely reflected the ideas of lifespan theorists. Subjects responded to the words or descriptions of the theorists about personality changes between middle and old age. The middle-aged were described in terms of both Erikson's Generativity, and Complexity, a term capturing Neugarten's (1968) views about the middle-aged person being active in a complex environment, selectively executing activities in multiple spheres. Old age was characterized in terms of psychosocial Integrity and Interiority, the latter term expressing the posited move in senior years toward introversion, individuation and reconciliation.

Young adult, middle aged, and old-aged subjects responded to the Complexity, Generativity, Interiority, and Integrity descriptors in terms of how they felt now and how they thought they would answer, or would have answered, at

the pertinent life stage. The older subjects rated themselves higher on Integrity than they felt they would have in younger years, while young and middle-aged adults expected to score higher on Integrity in old age than at present. While self-ratings on Generativity also bore out Erikson's ideas about the preoccupations of middle age, the Interiority and Complexity findings were highly variable. Jackson PRF control scales were readministered, again showing no change. This study, then, indicated that individuals do recognize themselves in Eriksonian concepts of lifespan development. The findings about Interiority reiterate that individuals may not become more introspective with time.

Ryff and Migdal (1984) next studied the self-ratings of young adult and middle aged women with regard to Intimacy and Generativity. Retrospective, current and prospective self-perceptions supported predictions regarding Intimacy, but both age groups felt engaged with Generativity issues in the present.

Generally, the findings of Ryff et al. reveal that adults subjectively see both change and stability in themselves over time. The results also provide important validations of Erikson's ideas, because they affirm that his perspectives do resonate with peoples' opinions concerning their own histories. Concluding an overview of these studies, Ryff (1984) recommends that future investigators

use more open-ended and exploratory procedures to illuminate perceived personal changes with age.

One last study explored psychosocial development in a sequential design. Whitbourne, Zuschlag, Elliot, and Waterman (1992) reported findings on the expanded Inventory of Psychosocial Development (Constantinople, 1969), including Boylin et al.'s (1976) Generativity and Integrity scales. These scales were administered to three cohorts of university students in 1966, 1976-77, and 1988-89. Ages ranged from 20-42. A sequential design diminishes the likelihood of cohort effects; similar changes occurring in different age groups during the same age periods at different historical times suggest that such changes are more than responses to particular cultural eras.

Results revealed, first, that subjects clearly and consistently changed and grew along psychosocial lines over time. Similar patterns of change taking place within two of the age cohorts further spoke for the existence of intrapersonal development, beyond the influence of cultural factors, although there was no attempt to minimize such influences. Developmental changes were shown to occur separately and in interaction with cultural events.

All analyses reflected increasing psychosocial resolution with age, except with regard to Integrity vs. Despair. All three cohorts produced low Integrity scores, and the two groups tested in 1977-78 showed a "precipitous decline" (p. 269) since then. Whitbourne et al. propose that

this outcome, together with strong increases in Industry scores for the oldest cohort, reflects a broad social preoccupation with work and materialism emerging across American culture in the 1980s. They also note a striking drop since 1970 in interest among college freshmen in finding a meaningful philosophy of life (U.S. House of Representatives, 1989). In this way, capitalistic social currents may have bred antipathy to the transcendent philosophical concerns of Erikson's eighth stage during the period studied. Of course, no one in the sample was close to the relevant age range for the eighth stage. These results await further investigation.

In summary, relatively few studies on eighth stage constructs specifically have been published; findings have been fragmented and inconclusive. Two early interview studies on old-age personality adjustment (Reichard, Livson and Peterson, 1962; Neugarten, Havighurst, and Tobin, 1968) found that an optimally adjusted group resembling Erikson's integrated type, and groups with lesser adjustment, including a nonreflective, contented type, could be reliably identified. Walaskay et al. (1983-84) introduced the semi-structured interview and status rating methodology, and successfully discriminated between integrated and despairing persons; intermediate statuses were captured with less certainty. Woods and Witte (1981) successfully linked life satisfaction in old age to psychosocial adjustment in the first six stages; Wagner et al. (1983) connected life

satisfaction, death anxiety, attitudes to aging and locus of control with problems in sleeping. The reports by Ryff and colleagues (Ryff and Baltes, 1976; Ryff, 1982a; Ryff and Heincke, 1983; Ryff and Migdal, 1984; Ryff, 1984) show that individuals do see themselves changing through life in some of the ways postulated by Erikson.

The impression these findings leave altogether is that the eighth stage constructs have been supported, but need further validation. In search of such validation, the study to be reported here adopted the methodology of Walaskay et al. (1983-84), in that subjects underwent a semi-structured interview with questions drawn from Erikson's writings, were rated according to the status approach, and completed a number of convergent measures.

Research hypotheses, convergent measures, and covariates

This study had two general hypotheses, the first of which was changed in two ways after the start of data collection. The first hypothesis was that Caucasian people aged 70 and over (later changed to 65 and over) could be reliably organized into four (originally five) classifications by independent raters through reference to subjects' responses on the Self Examination Interview (SEI), a semi-structured assessment instrument developed by the author (see Appendix A). Raters would be guided in their judgements by the Integrity Status Rating Manual (see Appendix B).

The second hypothesis was that subjects' scores on five additional self-report measures would covary predictably with the status groupings created by the Interview. Such covariations would provide some convergent evidence that the Interview assesses something approximating the intended psychological domain, which evidence would in turn provide some construct validity for Erikson's eighth stage.

The Integrity Statuses

Although Erikson's scheme describes each stage in terms of bipolar constructs, his writings on the eighth stage and studies by others of earlier stages suggest that many people cannot be classified simply on an either/or basis, as being, for instance, wholly 'Intimate' or wholly 'Isolated.' Way stations of ego development in between the defining endpoints for each stage have been called 'statuses' in earlier psychosocial stage research (Marcia, 1966; Orlofsky, Marcia, and Lesser, 1973; Bradley, 1992). In the present study, the eighth psychosocial stage is also investigated in terms of statuses, called 'Integrity statuses.' After ten pilot interviews for the present study were conducted by the author, five Integrity Statuses were postulated. They are described as follows:

1) Integrated:

This designation was selected over 'Integrity Achieved' because 'Integrated' connotes cohesion of the personality more than psychological obstacles surmounted; this

conceptualization also captures more realistically what the author observed in this study's subjects.

The Integrated person has realistic and insightful self-awareness, can explain the main influences which formed her character, and is reasonably optimistic in the present. She doesn't hide from regrets, but neither do they overwhelm; she is neither depressed nor unduly self-critical. Loss, sadness, and grief over inability to do as much as one would like are accepted. She is firmly connected to family, friends, community. Through the extent of her commitment to life, she affirms the values of her 'tribe.' She understands the relativity of ethnic and cultural backgrounds. She is still curious and involved, but overall feels content with her experiences and achievements. The ego is resilient.

2) Life Reviewing Status (Later dropped):

Erikson et al. (1986) suggest that all elderly people engage in life review, knowingly or not; it was hypothesized, then, that some might belong to a second Integrity status, 'Life Reviewing.' It was conjectured that individuals of this status would be addressing the central existential problems of the eighth stage, without having yet resolved them: Such as 'who have I been, and who am I continuing to become?,' 'what kind of life have I led?,' 'what has it meant?' These questions are seldom raised by people in the Nonexploratory, Pseudointegrated, and

Despairing groups. The Life Reviewing person was hypothesized to be seeking understanding and integration of the multifarious threads of his life, and to be fashioning an overall meaning, a validating story line for it. He was predicted to be analytical and philosophically oriented, alternately confident and doubting in answering the Interview.

The Life Reviewing status was rejected, however, after the author and one of the raters had studied the first 25 interview tapes. Only one subject of these 25 was given this rating, by the author, and at that point this status was dispensed with. The description just given did not fit the subjects being interviewed. Although the issue was revived periodically, no other subject in the sample was ever agreed to be mainly Life Reviewing.

Partial Integration (Nonexploratory and Pseudointegrated Types):

As a category, 'Partially Integrated' describes people who present some, but not enough of, the qualities of the Integrated person to be regarded as Integrated. In this way, Nonexploratory subjects tend to be contented and to have the life satisfaction seen in Integrated persons, but are quite unreflective. Pseudointegrated people can present coherent answers to Interview questions, indicating awareness of the questions, but these answers are often shortsighted. The two subtypes are here described more fully:

3) Partial Integration, Nonexploratory type:

Persons in this status convey general contentment, and have enjoyed career and/or family successes, but have engaged in little self-examination about internal functioning, values, purpose, or meaning in life. The key characteristic is that they have tended to stay all their lives within the worldviews and attitudes they were taught while growing up. Common preoccupations are hobbies, social life, and nurturing others. People in this status are almost never openly defensive, but will stay within a comfort zone of thoughts, emotions, and attitudes. The person may be considering Interview questions for the first time. She appears complacent and optimistic.

4) Partially Integrated (Pseudointegrated Type):

Erikson et al. (1986) discussed elders who, knowingly or not, gave accounts of their lives which sounded too pat. This phenomenon has also been described in Butler's (1975) work on life review. Elders may create excessively coherent self-presentations from various motives, including the wish that things had been better than they really were, a reluctance to disclose problems, and the wish to appear successful. In this study, such individuals were classed as Partially Integrated (Pseudointegrated Type). These persons are less able to self-examine than Nonexploratory subjects because they are more inwardly conflicted. While

Nonexploratory persons may think aloud about the questions posed, Pseudointegrated people tend to respond readily to Interview questions with answers that seem too definitely stated. There is a tendency to describe historical events more than the person's reactions to those events. The interviewer experiences some pressure to accept the speaker's self-presentation. The person rarely acknowledges damaging regrets or ambiguities. The life history may contain events suggesting low emotional control.

5) Despairing:

People of this status are depressed about disappointments, failures and missed chances in life. While everyone probably feels such emotions to some extent, they predominate in Despairing people. Holding on throughout their histories to narrow, inadequate, outdated and repressive ideas about themselves and life learned as children, they have not changed themselves, their ways of interpreting the world, or their circumstances enough to attain reasonable life satisfaction. Such qualities will appear in statements of sadness, regret, or failure, in self-denigrations or sarcasm, or in remarks implying a sense of futility or triviality: One subject said, "I'm a pretty dead piece of driftwood." There is also bewilderment, self-recognized or not. The person can be quite reflective, but still feel that no matter how you look at things, the final

result is unsatisfying. Despite some partial areas of life satisfaction, he is defeated.

Convergent measures

The first of the convergent instruments also acted as a measure of concurrent validity. This was the Integrity questionnaire devised by Darling-Fisher and Kline Leidy (1988; see Appendix C) as an extension to Rosenthal, Gurney, and Moore's (1984) Erikson Psychosocial Stage Inventory (EPSI), which measures development through only the first six stages.

In creating measures of the seventh and eighth stages, Darling-Fisher and Kline Leidy replicated Rosenthal et al.'s procedure. Expert judges selected subgroups of 16 Likert items each for the Generativity and Integrity subscales from a larger pool derived from key words and phrases in Erikson's writings. Following administration of these 16 items (and a modified selection of items for the other scales) to a trial sample of 168 adults ranging in age from 19-86, 10 items were selected to comprise the Ego Integrity/Despair subscale. The criteria for final item selection were response distributions, inter-item and item-total correlations, theoretical meaning, and participants' comments. In the present research, scores on this questionnaire were expected to correlate positively with status rankings. The Despairing, Pseudointegrated,

Nonexploratory, and Integrated statuses were regarded as rising, in that order, in psychosocial maturity.

The second convergent instrument, chosen as a measure of personal maturity, was the Openness to Experience subscale from the NEO Personality Inventory (Costa and McCrae, 1985; see Appendix D). For Erikson, fulfillment comes from equal components of individual maturity and social belonging. Interestingly, this model can be seen as a synthesis of two major traditions in personality theory, one individually- and the other socially-oriented. In the first tradition, represented by individualistic theorists such as Fromm (1941) and Maslow (1954), maturity may mean a departure from social norms and standards; cleaving to social conventions can itself be a form of neurosis. In the second tradition, exemplified in the writings of Sullivan (e.g., 1972) and Adler (e.g., 1963a), psychological health is achieved mainly through social belonging: successful alignment with the social world through accurate readings of that world (Helson and Wink, 1987). In the present research, instruments assessing both types of adjustment are included.

Emphases on the 'solo' kind of personality growth appear in Erikson's scheme, for instance, when the person creates his own code of values during Identity Achievement. Similarly, the Integrated person needs to be autonomous, and confronts death alone. The characteristic chosen to reflect personal maturity in this study, Openness to Experience, is closely linked to ego maturity. McCrae and Costa (1980)

reported strong correlations between seven of ten measures of Openness and ego levels scored on the Washington University Sentence Completion Test (Loevinger and Wessler, 1970). Further, they note that in Carl Rogers's (1951, 1961) model of ideal personality functioning, the most mature people are open to experience. Erikson et al. (1986) wrote, "The oldest and wisest elders understand that situations are complex and that many factors have to be weighed and distinguished. Prejudice is maladaptive and presumptuous, for with age one is forced to concede how little one knows" (p. 288). Erikson further posits disdain and dogmatism as pitfalls of the eighth stage. Whitbourne (1985) wrote that defensive, constricted attitudes distort experience and forestall the achievement of synthetic conceptions of self and world.

When defined in terms of adjective pairs, Closedness and Openness are represented by such terms as 'Conventional-original,' 'Conforming-independent,' and 'Traditional-untraditional.' Openness is linked with personal and political liberalism, and can be reliably differentiated from intelligence (McCrae and Costa, 1985a, 1985b).

In a sample of young adults, Tesch and Cameron (1987) found that openness was correlated positively with ratings of current and past identity exploration, and negatively with intensity of identity commitment. Whitbourne (1986a) reported that Openness to Experience predicted identity flexibility in a sample of middle-aged adults. Sperbeck,

Whitbourne, and Hoyer (1986) found that high openness scores in adults of all ages correlated with the production of more recent memories, and more memories overall, on a free-recall projective test. In the present study, Openness was predicted to correlate positively with Integrity statuses.

Development and validation research on the NEO Personality Inventory was originally conducted, for the most part, on two longitudinal samples of adults aged 25-95. The first comprised a group of 2000 mainly white male veterans from the Normative Aging Study (Bell, Rose and Damon, 1972), representing all but the lowest socioeconomic groups, and the second was made up of a group of 400 men and 300 women participating in the Baltimore Longitudinal Study of Aging. Through literature surveys, the investigators arrived at six facets each for the three major domains studied, Neuroticism, Extraversion, and Openness (N, E, and O), and 14 items each were developed for all 18 facets. The six facets of Openness are Fantasy, Aesthetics, Feelings, Actions, Ideas, and Values. The original 265 items were administered to 650 of the Baltimore Aging Study subjects; in factor analyses, all 18 facets loaded on their intended factors. Refinements maximizing the discrimination between facets narrowed the item pool to eight items per facet (Costa and McCrae, 1985).

Studies of the Inventory's factor structure showed that the facets of N, E, and O loaded the same ways across genders; the facets again clustered in the predicted ways

when 303 spouses rated subjects (McCrae and Costa, 1983a). In a study of peer ratings, 738 peers of 275 Baltimore Aging subjects who had known the subjects over a period of years rated them on all five NEO factors. Correlations between peer ratings involving two, three and four raters at a time were all significant (McCrae and Costa, 1987).

In reliability studies, individual facets had internal consistencies from .6 to .86; alphas for the overall Openness scale were .86, .88, and .89 for male, female, and spouse ratings respectively. The test-retest correlation coefficient for reliability was .86 on 31 subjects retested after six months (McCrae and Costa, 1983a).

In further studies of convergent and discriminant validity, Openness overlapped little with N, E or Psychoticism on the Eysenck Personality Inventory and Eysenck Personality Questionnaire (Eysenck and Eysenck, 1964; Eysenck and Eysenck, 1975). Lonky, Kaus, and Roodin (1984) reported high correlations of Openness with Rest's (1979) measure of maturity in moral judgement. Openness correlated strongly with the Thoughtfulness scale of the Guilford-Zimmerman Temperament Survey (Guilford, Zimmerman, and Guilford, 1976), and with Theoretical and Aesthetic values on the Allport-Vernon-Lindzey Scale of Values. It correlated negatively with Economic values on the Allport-Vernon-Lindzey Scale, and with the Traditional Family Ideology Scale (Levinson and Huffman, 1955).

McCrae and Costa (1980) found that high-Open men revealed psychological-mindedness, with insight into their own reactions and those of others, on a sentence completion test. In research on the Normative Aging Study sample, they observed that high-Open men assessed after a 10-year period, during which life events were also measured, were more likely to have moved, become separated or divorced, been demoted, quit or begun new lines of work, or to have become involved in lawsuits (Costa and McCrae, 1980).

The third convergent instrument used in the present project was the Competence scale from the 'new' California Personality Inventory (CPI; Gough, 1987; see Appendix E). This was the scale selected to measure social adjustment, or the extent to which the person has attained happiness through group belonging in familial, social and occupational realms (Helson and Wink, 1987). Some of the 'social' criteria for the Integrated person in the eighth psychosocial stage include a willingness to follow the established figureheads of the group, to be oneself a leader and teacher, and to defend group mores as a statement of personal commitment.

In developing the CPI, Gough was strongly influenced by sociological and pragmatic traditions (Gough, 1968; Megargee, 1972). He was concerned mainly with observable social realities, and the CPI scales attempt to measure 'folk concepts,' aspects of daily social relating. The Competence scale measures "level of realization of one's

potential for effective functioning" (Helson and Wink, 1987, p. 531), with particular regard to social interactions. This scale correlates highly with other CPI scales assessing social maturity: intellectual autonomy, ambition, effectiveness, interpersonal sensitivity, and sense of well-being (Helson and Wink, 1987). Again, in the present study, scores on this measure were predicted to correlate positively with Integrity status rankings.

The fourth convergent measure, Perceived Health, is a one-item Likert question concerning the subject's perceptions of his or her current health state (see Appendix F). Such items are often used in gerontological research on subjective wellbeing (Maddox, 1965; Palmore and Luikart, 1972; Kozma and Stones, 1978). Extensive literature reviews (Larson, 1978; Kozma and Stones, 1978) have shown that health is the best predictor of subjective well-being in older persons; perceived health ratings consistently correlate more strongly with reported well-being than physicians' ratings, although these are also good predictors (Larson, 1978). Single-item measures of perceived health are better predictors of subjective life satisfaction than medical records because an individual's view of his medical status is influenced by many mediating factors, including his expectations about how good his health should be, and knowledge about the health status of relatives and acquaintances (Larson, 1978; Jaslow, 1976; Kozma and Stones, 1983).

In this study, Perceived Health ratings were interpreted as overall statements about personal wellbeing. However, predictions regarding group differences on this measure had as much to do with differing variances between the groups as with group mean differences. That is, it was predicted that Integrated persons would report moderately good levels of Perceived Health (and by implication, moderately good life satisfaction); they were not expected to claim extremely good happiness or health, because this would imply that a final, perfect stage had been reached, whereas Erikson states that successful eighth-stage resolution involves ongoing engagement and struggle with life, and because resolution of the eighth stage requires a realistic grasp of life's unhappinesses (Erikson et al., 1986). Also, comparatively little variability around the mean was predicted for this group; whereas scatter in other groups was predicted to reflect indecisiveness or vaguely defined self-awareness, Integrated subjects were expected to be consistently clear and focussed in their choices on this instrument.

Life Reviewing individuals were expected to produce a slightly lower mean score than the Integrity Resolved subjects, reflecting somewhat less life satisfaction, because of their unsettled, questioning outlook; more scatter in their scores was also predicted, again because of their unresolved worldview. Meanwhile, the Partially Integrated (Nonexploratory) group was expected to produce a

moderately high mean score, similar to that of the Integrity Achieved group, which it partly resembles; however, because these subjects possess less self-awareness, there was expected to be more scatter to the range of their answers. Those classed as Pseudointegrated were predicted to claim better-than-average health, as part of their style of denial and socially desirable responding, and to have the highest mean score on this variable, with little variability, because claiming good wellbeing is a keynote predilection in this group. Despairing individuals were predicted to report low general wellbeing, and were expected to rate their Perceived Health as poor. However, it was felt they might also give denial responses, and rate their health as being very good; or they might feel their health was one of few bright spots in an otherwise unhappy state. So, while this group was predicted to exhibit a lower mean score than any other group, they were also expected to display the most scatter in their responses.

The fifth convergent measure in the present study is the Geriatric Depression Scale (GDS; Yesavage, Brink, Rose, Lum, Huang, Adey, and Leirer, 1983; see Appendix G). Subjects are asked to respond in reference to their mood over the last week. Though several good instruments for assessing depression already existed, the GDS was developed to respond to the particular problems which go with diagnosing depression in the elderly: Many elderly patients resist psychiatric questioning, hypochondriacal complaints

can mirror the somatic signs of depression, and depression and dementia often coexist and overlap (Brink, Yesavage, Lum, Heersema, Adey, and Rose, 1982).

While the classic cognitive, affective, and somatic signs of depression are covered by GDS items, problems more specific to elderly depressives are also especially included, for example, impaired motivation, lack of future orientation, and lack of self-esteem (Brink et al., 1982). In this way, many of the GDS items have an existential flavour, e.g, "Are you basically satisfied with your life?," "Do you often get bored?," "Do you feel pretty worthless the way you are now?" "Do you enjoy getting up in the mornings?" Questions like these address central attitudes to self and life which are also central to the struggles of the eighth psychosocial stage.

Because the Integrity Statuses, from Integrity Resolution through to Despairing, imply ever-increasing reasons to be depressed, a simple pattern of negative correlations between GDS scores and Integrity Statuses might be predicted. However, because the GDS was considered potentially susceptible to socially desirable responding, the same pattern of results was predicted for GDS scores across the Integrity Statuses as for the Perceived Health measure, for the same reasons.

The following summarizes the specific hypotheses tested in this study:

1. Persons in the Integrated status group will score significantly higher on the Integrity subscale of the Modified Eriksonian Psychosocial Inventory (Darling-Fisher and Kline Leidy, 1988) than subjects in the other status groups.
2. Persons in the Integrated status group will score significantly higher on the NEO Openness to Experience Scale than subjects in the other status groups.
3. Persons in the Integrated status group will score significantly higher on the CPI Competence scale than subjects in the other groups.
4. Persons in the Integrated status group will score moderately positively on the measure of Perceived Health, and there will be only moderate scatter to their scores. Life Reviewing individuals are predicted to score moderately positively, although with a mean slightly below that of the Integrated subjects, and with a greater variability. People in the Nonexploratory group will produce a mean score similar to that of the Integrated group, but this group will have scores that cluster closer together than those of the Integrated group. Persons in the Pseudointegrated group are predicted to score highest on this measure, with little variance to their scores. The Despairing group is predicted to produce the lowest mean score with the highest amount of variance.
5. Persons in the Integrated status group will score moderately positively on the Geriatric Depression Scale, and

there will be only moderate scatter to their scores. Life Reviewing individuals are predicted to score moderately positively, although with a mean slightly below that of the Integrated subjects, and with more variability than the Integrated group. People in the Nonexploratory group will produce a mean score similar to that of the Integrated group, but this group will have scores that cluster closer together than those of the Integrated group. Persons in the Pseudointegrated group are predicted to score highest on this measure, with little variance to their scores. The Despairing group is predicted to produce the lowest mean score with the highest amount of variance.

Method

Subjects

Subjects were 100 Caucasian men and women aged 65 or older living in the Greater Vancouver area. In order to limit the confounding variables that a cross-cultural sample might have introduced in this initial attempt at eighth-stage construct validation, the ethnic makeup of the sample was kept homogeneous.

Seventy was originally the minimal age for entry to this study. Erikson does not specify which ages should be linked with each stage; individual growth, he says, is too fluid a process within persons, and too variable across individuals, to allow the specification of strict age boundaries for the stages (Erikson et al., 1986). However, a specific minimum age was needed to help define the population to which findings could eventually be generalized. The minimum age of 70 was first selected because not all subjects would necessarily have retired by 65, as retirement at 65 is not mandatory in Canada. Even had they retired by that age, it was conjectured that life review would start gradually, and be more completely in evidence by age 70. Additionally, in pilot interviews conducted by the author with ten subjects ranging in age from 56 to 78, it was noted that 6 of 7 subjects in their 60s were still involved primarily in generative (seventh stage) pursuits, including working, volunteering in the community, and providing for family life. The two subjects

over 70 were also involved in some of these pursuits, but in a more detached way; their involvements were undertaken on a more optional basis. For them, the mainly generative period appeared to have passed. For all these reasons, then, 70 was designated as the entry age, with no upper age limit.

After 15 study subjects were interviewed, none were rated Life Reviewing. The 16th subject, referred by a subject who forgot that the cutoff age was 70, was only 65, and she received the Life Reviewing rating. It was then speculated that the sixties might be the decade when life reviewing was more likely to occur. In addition, among ten pilot subjects, the only one rated Life Reviewing had been 65. As a result, the age boundary for inclusion in the study was lowered to 65. As will be discussed below, the Life Reviewing Status category was eventually dropped altogether, but data collection had by then proceeded too far to reinstate the entry age level of 70.

Of the 100 interviews conducted, one could not be used due to a defective cassette tape. The mean age for the remaining sample was 75.57, SD 6.49 with a range of 65-90. There were 68 women and 31 men. This proportion is consistent with the ratio of males to females aged 75 in Canada in 1986 (Statistics Canada, 1987). Fifty subjects volunteered on their own initiative and 49 were referred either by other subjects, members of their families, friends, or in one case a public health nurse.

Volunteers were recruited through a variety of sources. Primarily these were monthly seniors' publications, a city newspaper, a neighborhood newspaper, and advertisements on bulletin boards in community centers and one senior centre. The single advertisement used can be seen in Appendix H. After being interviewed and tested, subjects were requested to suggest the names of acquaintances for the study.

The question of possible dementia in elderly subjects

Participation in the study required that subjects' cognitive functioning be intact. While subjects were being interviewed and tested, they were observed for any of a short list of common signs of organic brain syndrome (see Appendix I). These signs were specified by Dr. Stephen Holliday, a gerontologist with extensive experience in clinical gerontological settings. The author also worked for over a year in the geriatric division of a long term care institution conducting neuropsychological assessments, and was familiar with the common features of cognitive impairment. If any such signs were noted, that subject was to be excluded from the study. No subject was excluded for such reasons.

Measures

The Self Examination Interview

The Self Examination Interview (see Appendix A) was developed by the author as a semi-structured instrument to assess each subject's Integrity status. The statuses are described below. The interview questions were drawn from Erikson's (1950, 1963, 1968a,b, 1982, 1986) writings about the eighth stage. Five main themes were elucidated from these writings; each question in the Interview pertains to one of the themes. Subjects' responses were given status ratings under each of the five theme headings, and from these ratings a single cumulative rating of the person's Integrity Status was made.

The five themes are:

1. *Engagement in life review during retirement years.* A sample question is, "Do you ever look back over your life, to make sense of how it has gone?"

2. *Understanding where one's life fits into world (global and local) history.* A sample question is, "How do you expect you will be remembered in the world? (Probe:) How do you feel about that?"

3. *Being a leader and mentor.* A sample question is, "Do you feel that you have more to offer to the people around you now? Less?"

4. (i). *Defending group values against threat.* For example, "What has been the hardest thing for you to adapt to in recent years? How did you handle that?"

(ii). *The things one would die for (if any); views on the afterlife.*

For example, "Is there anything you would be willing to die for?"

5. *A sense of comradeship with people of distant times, places, and pursuits*. For instance, "From what you've seen of people over your lifetime, how different would you say they are from one another?"

The Integrity Status Rating Manual

Responses to the Interview are scored according to guidelines laid out in the Integrity Status Rating Manual, written by the author (see Appendix B). This Manual was developed after the author conducted a series of ten pilot Interviews with a group of subjects ranging in age from 56 to 78. This group included six family friends, three sex offenders on parole, and a psychotherapist. There were five interviewees of each gender. Each subject was classified into one of the (then) five hypothesized Integrity Statuses. Two were classified as Integrated, one as Life Reviewing, two as Partially Integrated (Nonexploratory Type), three as Partially Integrated (Pseudointegrated Type), and two as Despairing.

The Manual directs Interviewers to rate Interview responses along two key dimensions: 1) Degree of conscious commitment and 2) Continuity from beliefs to actions. These 'barometric' qualities were inferred from Erikson's writings

on the eighth stage; the more they are evident in the person's responses, the higher the responses are rated. They are defined as follows:

1. Degree of Conscious Commitment:

The person is able to make himself clear to the interviewer because his own attitudes and values are clear to him. The person also understands why he values these things. He can define what is unique about his social-familial-occupational group and is happy with how he belongs to it. The overall worldview is sensible, practical and ethical. The person lives up to, and lives by, strong personal values.

2. Continuity from Beliefs to Actions

The individual is well engaged with a few main personal concerns. The value system is clearly a source of choices and actions in daily life. Self-presentation is plausible and consistent: She can be counted on to say what she will do and do what she says. She is reliable and has a nondefensive frankness. She has ongoing attachments with close others, and intends to carry on 'doing more' in life.

The Integrity subscale of the Modified Eriksonian Psychosocial Inventory (MEPSI)

The first convergent measure is an Integrity questionnaire devised by Darling-Fisher and Kline Leidy (1988) as an extension to Rosenthal, Gurney, and Moore's (1984) Erikson Psychosocial Stage Inventory (EPSI; see

Appendix C). This is a ten-item Likert instrument with five possible responses ranging from "Hardly ever true" to "Almost always true." A sample item is, "As I look over my life, I feel a need to make up for lost time." In validation studies, Cronbach's alpha for the ego integrity scale was .80. Demographic characteristics such as income, employment status, and chronic illness did not affect Ego Integrity score variance. As predicted, increased age was linked with higher Integrity scores, and strong correlations were reported between scores on the Integrity subscale and scores on the Trust, Identity, Autonomy, Industry, Initiative, and Intimacy subscales. As additional evidence for the construct validity of all the scales, the authors noted that subjects' frequency of exercise, interpreted as an index of psychosocial wellbeing, correlated with better psychosocial attributes.

It is important to note that the variance of Ego Integrity/Despair scores was higher for women than for men, though sex differences were not found on any other subscale. While the meaning of this finding is unclear, the overall validity data for the subscale still permit its use with both genders (Darling-Fisher and Kline Leidy, 1988).

The Openness Scale from the NEO Inventory

The second convergent measure is the Openness scale from the NEO Inventory (Costa and McCrae, 1985; see Appendix D). Openness is one of five major traits which, in the NEO

model of personality, subsume most important aspects of normal personality. This scale measures receptivity to new ideas, feelings, experiences, people; it is "best characterized by [the adjectives] original, imaginative, broad interests, and daring" (McCrae and Costa, 1987, p. 87). Most pertinently for the present research, Openness is linked to psychological maturity and differentiation. Integration depends, first of all, on openness to those thoughts, feelings and experiences which are to be integrated. In this study, Integrated subjects were predicted to score highest on Openness, followed by Nonexploratory, Pseudointegrated, and Despairing subjects, in that order.

Extensive studies on the NEO Personality Inventory have established good reliabilities and validities for the overall scale and each subscale (Costa and McCrae, 1985; McCrae and Costa, 1983a; McCrae and Costa, 1987; McCrae and Costa, 1980). The facet subscales measure Fantasy, Aesthetics, Feelings, Actions, Ideas, and Values.

The Openness scale has 48 Likert items with five options each ranging from "Strongly Disagree" to "Strongly Agree." A typical item from the Fantasy scale is, "I would have difficulty just letting my mind wander without control or guidance." An item from the Aesthetics scale is, "Certain kinds of music have an endless fascination for me." In the present study, each successive set of six items contained one item from each subscale to minimize subjects' guessing

the scale's purpose.

The California Personality Inventory Competence Scale

The third convergent measure is the Competence scale from the 'new' California Psychological Inventory (CPI; Gough, 1987). This scale was used because it measures the maturity of subjects' attitudes toward social belonging (Helson and Wink, 1987).

Levin and Karni (1970), applying a smallest space analysis to the CPI, produced a three-dimensional model of the Inventory, in which two other scales, Internalization-Externalization and Norm Obeying versus Norm Questioning, were balanced by Realization of Potential for Effective Functioning, or Competence. This scale has a minimum correlation with the two others, and a maximum correlation with overall CPI profile elevation. It has acceptable levels of internal consistency and test-retest reliability for men and women. Mean scores from groups belonging to a variety of occupational and educational levels support its validity. In a normative sample of 1,000 women, the Competence scale showed its highest correlations with CPI Tolerance (.87), Achievement via Independence (.86), Intellectual Efficiency (.83), Psychological Mindedness (.79), Well-Being (.77), Capacity for Status (.72), Achievement via Conformance (.69), Responsibility (.67), Independence (.66), and Empathy (.65) (Helson and Wink, 1987).

The Competence scale has 58 True-False questions from the full CPI. Two sample items are, "When prices are high you can't blame people for getting all they can while the getting is good" and "People today have forgotten how to feel properly ashamed of themselves." It was hypothesized that the five Integrity status groups would score on this measure in descending order of psychosocial maturity.

Perceived Health

The fourth convergent measure selected is a one-item Likert measure of Perceived Health. As noted, such items are commonly used in gerontological research on subjective wellbeing (Maddox, 1965; Palmore and Luikart, 1972; Kozma and Stones, 1978). The question used in this research was, "If '1' represents the very poorest and '7' the very best, how would you rate your physical health at the present time?" Studies linking such self-assessments of health to reported well-being have yielded correlation coefficients from r=.2 to .5 (Edwards and Klemmack, 1973; Larson, 1975; Palmore and Luikart, 1972; Spreitzer and Snyder, 1974). In cases where socioeconomic status and employment were controlled, the link between perceived health and well-being persisted (Cutler, 1973; Edwards and Klemmack, 1973). In short, this question was expected to be a simple but useful measure of life satisfaction.

The Geriatric Depression Scale

The fifth convergent measure in the present study is the Geriatric Depression Scale (GDS; Yesavage, Brink, Rose, Lum, Huang, Adey, and Leirer, 1983). It has 30 yes/no items and can be administered orally or in writing. The cutoff score at which mild depression begins to be indicated is 11. The scale's original item pool was generated by research- and clinically-oriented geriatricians. The GDS has satisfactory reliability (Yesavage et al., 1983; Brink, Curran, Dorr, Janson, McNulty, and Messina, 1985), and research evidence supports its validity: In Yesavage et al. (1983), the scale successfully discriminated between three levels of depression in patients diagnosed with the Research Diagnostic Criteria (RDC; Spitzer, Endicott, and Robins, 1978). Scores significantly increased with level of depression, the GDS correlating .82 with the classification variable. Also using the RDC as a standard, Brink et al. (1982) compared the sensitivity (rate of true positives) and specificity (rate of true negatives) of the GDS, the Hamilton Rating Scale, and the Zung Self-rating Depression Scale. When the score marking mild depression on the GDS was 11, the GDS was 84% sensitive and its specificity was 94%; when the specificity of the three scales was held constant at 80%, the sensitivity of the GDS (90%) was higher than that of the Hamilton (86%) and the Zung (82%). Norris, Gallagher, Wilson, and Winograd (1987) found that the GDS was 89% sensitive and 73% specific in diagnosing a sample of

31 RDC-identified elderly depressives; sensitivity and specificity values attained were almost identical when DSM-III criteria were used. Further studies (Yesavage, Rose, and Lapp, 1983; Kafonek, Ettinger, Roca, Kittner, Taylor, and German, 1989) have supported the GDS's psychometric soundness for use with geriatric populations.

Covariates

Finally, information on two covariates, age and education, was included in data analyses. No prediction was made about the link between age and integrity status. Education was a covariate because of the possibility that the Interview format might favor the articulate.

Procedures

Subjects were interviewed in their homes, in the quiet room of a senior centre, or on two occasions, in the author's office at the university. Only one subject was living in a combined care facility and retirement home; although crippled with arthritis, she showed no signs of cognitive impairment. Most interviews lasted about one hour and a quarter, the longest two and a quarter hours. Subjects then completed the questionnaires, or kept them and mailed them to the experimenter later. Completion of these, comprising a total of 147 items, usually took 25 minutes. Only one person failed to return the questionnaires, but a number had to be telephoned back regarding items left

unanswered or answered ambiguously. By the end of data collection, only two questionnaire items were still unanswered and these were prorated. If the person inquired, the author offered to mail him or her a summary of the study and its findings once the thesis had been defended. No financial compensation was made.

Establishing the reliability of the Self Examination Interview

Following each interview, the author listened to the tape and assigned each subject a tentative Integrity Status, following the scoring principles in the Integrity Status Rating Manual. Subjects were given status ratings for each of the five theme headings, and then an overall status rating was made from these. Questionnaires were not scored until after ratings were made. The taped interviews were next rated independently by blind raters. These were two psychology graduate students, one clinical, one developmental, trained by the author. One rated all 99 tapes, the other 81. Following the completion of each of their ratings, author and co-rater would discuss subject and rating. An experienced clinical psychologist researcher consulted on 17 tapes, which was useful for clarifying the judgement scheme. The author altered his ratings a total of 22 times after discussions with other raters. Each subject eventually had a final Integrity Status (IS), decided by the author, which was entered into data analyses.

Results

All data analyses were performed using BMDP Statistical Software (Dixon, Brown, Engelman, Frane, Hill, and Toporek, 1990).

Inter-rater reliabilities (Table 1)

The first analyses explored levels of agreement between the author and the two blind raters (S.D. and J.K.) in making status ratings. Table 1 shows percentages of agreement between raters, percentages of agreement expected based on chance, and kappas for ratings by the author (S.H.), the first rater (S.D.), and the second rater (J.K.).

Percentages of agreement always exceeded chance expectation. The kappa measuring the reliability between S.D.'s ratings and the author's initial set of ratings was .47.

As noted, the author sometimes changed his ratings after talks with other raters; the ratings by S.H. compared to those by J.K. differed in 12 instances from his first set of ratings. J.K. completed 81 ratings. The kappa linking her ratings and those of S.H. was .38. The kappa between the ratings of S.D. and J.K. was .22.

S.D. and S.H. agreed in 57% of 99 cases; S.H. and J.K. also agreed in 57% of 81 cases. S.D. and J.K. agreed in 46% of 81 cases. Agreement by two of three raters was achieved in 84% of the 81 cases rated by all three raters, including the 11 cases where S.H.'s ratings had changed after

discussions with S.D. but before J.K. completed her ratings. The percentage of two-thirds agreement expected by chance in these cases was 71%. When the 11 cases where judgements had changes were removed, two-thirds agreement was achieved in 60/70, or 86%, of cases. Here, two-thirds agreement was expected by chance in 74% of cases. The percentages obtained here are comparable to those obtained in the first Identity and Intimacy studies (Marcia et al., in press).

Following all previous ratings, the author arrived at a set of final Integrity Status (IS) assignments. These were the assignments used in the analyses described below. According to these final classifications, 26 subjects were Integrated, 49 were Nonexploratory, 18 Pseudointegrated, and 4 Despairing. The kappa between S.D.'s ratings and Integrity Status ratings was .47; between J.K.'s ratings and IS ratings, .47.

Table 1

Percentages of agreement between raters, percentage agreements expected by chance, and kappa reliability coefficients

	Status Assignments				
	SD	JK	SH	SHD	IS
Agreement		.46	.57		.63
Chance expectation SD	1	.31	.19		.30
Kappa		.22	.47		.47
Agreement	.46		.53	.57	.63
Chance expectation JK	.31	1	.32	.31	.30
Kappa	.22		.31	.38	.47
Agreement	.57	.53		.87	.85
Chance expectation SH	.19	.32	1	.35	.53
Kappa	.47	.31		.80	.77
Agreement		.57	.87		.89
Chance expectation SHD		.31	.35	1	.36
Kappa		.38	.80		.83
Agreement	.63	.63	.85	.89	
Chance expectation IS	.30	.30	.53	.36	1
Kappa	.47	.47	.77	.83	

Note.
SD: Rater 1
JK: Rater 2
SH: Ratings by SH before comparing ratings with SD
SHD: Ratings by SH after comparing ratings with SD, but before comparing ratings with JK
IS: Integrity Status assignments following discussions with SD, JK, and in 17 cases Dr. Marcia

General points concerning univariate analyses of variance (Tables 2 and 3)

ANOVAs using the Integrity Statuses were performed on the data from each convergent measure.

The meagre size of the Despairing group (N=4) created problems for the F test, because the assumption of homogeneity of variances across groups was strained. Accordingly, all analyses were performed with and without this group.

Also, the Nonexploratory group was almost twice as large as the next largest group, and questionnaire scores in this group often clustered together. In consequence, the Brown-Forsythe test statistic (B-F), which does not assume that variances are equal, was consulted along with the ordinary F. In the following reports of results, both F and B-F statistics, with associated probabilities, are given.

Although the Brown-Forsythe does not assume variances to be equal, it assumes that each separate group's variance nears its own 'true' variance. This assumption cannot be sustained with regard to the Despairing group because of its size, so it is still appropriate to report findings from analyses performed with and without the Despairs' data.

Additional t-tests were conducted for the sake of inter-status comparisons on each convergent measure and covariate. The homoscedasticity assumption of the usual Tukey test was not met in the present data because of the large differences in group variances, so the Tukey-Kramer

test was used. This test, like the Brown-Forsythe variation on the *F* test, is based on separate rather than pooled group variances. Because the Tukey-Kramer test assumes heteroscedasticity, it is a more rigorous test than the Tukey. The usual *t* is converted to a *q* statistic by multiplying *t* by the square root of 2, and significance is assessed by consulting the *q* table of critical values for the studentized range statistic. Further, when only three groups are being compared and the Tukey-Kramer test is used, and if the difference between one of the pairs is significant, it is then permissible to use the standard *t*-tables, rather than than the *q* tables, for assessing significance in the remaining two comparisons. In the following summaries, only statistically significant intergroup comparisons are reported.

Table 2 displays the means and standard deviations for each status group on each measure; Table 3 shows ordinary *F* and Brown-Forsythe statistics for each convergent measure when Despairs were included and when they were excluded from analyses.

Table 2: Means and standard deviations on convergent measures and covariates by status group

	Integrated N=26	Nonexploratory N=49	Pseudo-integrated N=18	Despairing N=4
Integrity Subscale				
Mean	41.23	40.82	38.94	37.25
SD	4.61	4.02	5.25	5.56
NEO Openness				
Mean	131.54	116.82	122.78	104.00
SD	17.20	17.82	20.60	26.50
CPI Competence				
Mean	42.04	39.57	36.67	27.75
SD	5.46	7.17	7.92	16.09
Perceived Health				
Mean	5.62	5.57	4.78	5.00
SD	1.13	1.08	1.35	1.41
Geriatric Depression				
Mean	3.92	4.61	7.5	14.5
SD	4.01	3.56	7.40	9.4
Age				
Mean	74.70	76.55	74.00	79.50
SD	6.76	6.91	4.62	4.80
Education				
Mean	16.06	13.22	13.36	14.00
SD	4.52	3.73	4.35	8.25

Table 3: Results from Univariate ANOVAs

	WITH DESPAIRS						WITHOUT DESPAIRS					
Variable	F	df	p	B-F	df	p	F	df	p	B-F	df	p
Integrity	1.68	3,93	NS	1.33	3,18	NS	1.53	2,90	NS	1.3	2,49	NS
Openness	4.8	3,93	.0037	3.55	3,12	.047	5.57	2,90	.0052	5.24	2,54	.0083
Competence	5.25	3,93	.0022	2.47	3,6	NS	3.25	2,90	.04	3.2	2,51	.048
Perceived Health	2.53	3,93	.06	2.08	3,17	NS	3.6	2,90	.03	3.23	2,63	.047
Depression	6.94	3,93	.0003	3.37	3,9	.068	3.45	2,90	.036	2.41	2,32	NS
Age	1.38	3,93	NS	1.78	3,9	NS	1.32	2,90	NS	1.53	2,74	NS
Education	2.67	3,93	.052	1.42	3,7	NS	4.41	2,90	.015	4.01	2,57	.02

Fs are ordinary Fs obtained from univariate ANOVAs. B-F stands for Brown-Forsythe statistic, which is similar to the ordinary F except that group variances are not assumed to be equal.

Findings of note from these univariate ANOVAs are discussed briefly here:

1) The Integrity subscale of the Modified Eriksonian Psychosocial Inventory (MEPSI)

Group differences on this measure were nonsignificant, whether or not Despairs were included. Group means, however, did follow the predicted trend, dropping in order from Integrated to Despairing: Integrated 41.23, Nonexploratory 40.82, Pseudointegrated 38.94, Despairing 37.25.

2) The Openness to Experience Scale

The original prediction, that group means would descend from Integrated to Despairing in order, was not supported. While the Integrated group scored highest ($\underline{M}$=131.54) and the Despairing group lowest ($\underline{M}$=104) on Openness, the Pseudointegrated group scored higher ($\underline{M}$=122.78) than the Nonexploratory ($\underline{M}$=116.8). In intergroup comparisons, the Integrated group scored significantly higher than the Nonexploratory ($\underline{q}(52)=4.49$, $p<.05$), when Despair data were included, and this held up ($\underline{q}(52)=4.92$, $p<.01$) when Despairs were removed from analysis.

All four analyses, however (with and without Despair data, and using the ordinary $\underline{F}$ and Brown-Forsythe statistics), revealed significant group differences.

3) The California Personality Inventory Competence Scale

Means fell in the predicted order: Integrated 42.04, Nonexploratory 39.57, Pseudointegrated 36.67, Despairing 27.75.

Group differences on this measure were significant in three of four analyses; that is, when Despairs were included, the F test produced a significant result ($F(3,93)=5.25$, $p=.0022$), while the Brown-Forsythe test did not (B-$F(3,6)=2.47$, NS). When Despairs were excluded, the F and Brown-Forsythe statistics were both significant: $F(2, 90)=3.25$, $p=.04$; B-$F(2,51)=3.2$, $p=.048$. When Despairs were removed from the analysis, the Integrated group was significantly different from the Pseudointegrated in a Tukey-Kramer test: $q(27)=3.53$, $p<.05$. In this case, the difference between the Integrated and the Nonexploratory groups was also significant ($t(27)=1.67$, $p<.05$). In all, these outcomes supported the prediction that means on this measure would descend in order from the Integrated to Despairing groups.

4) Perceived Health

The original predictions were that the Integrated group would score moderately positively on this measure, with little scatter; that Nonexploratory subjects would score similarly, but with greater variability; that Pseudointegrated subjects would score highest, with little scatter; and that Despairing subjects would score lowest overall, with most scatter.

These predictions were not supported. The Integrated group scored highest ($M=5.62$, $SD=1.13$) followed by the Nonexploratory ($M= 5.58$, $SD=1.08$), and the Pseudointegrated

mean (4.78, SD=1.35) was marginally lower than that of the Despairing group (5, SD=1.41)

Nevertheless, group differences on this measure reached significance when Despairs were excluded (F(2.90)=3.6, p=.03; B-F(2, 52)=3.23, p=.047). Significance was very marginally achieved when Despairs were included (F(3, 93)=2.53, p=.06; B-F(3,17)=2.08, NS). When the scores of Despairing and Pseudointegrated subjects were combined to make one group group, differences were significant F(2, 94)=3.78, p=.0264, B-F(2, 63)=3.49, p=.0366. Overall, then, results approached significance.

5) Geriatric Depression Scale

The original predictions for this measure were identical with those made for the Perceived Health measure. These predictions mainly were not supported, although the Despairing group did score highest on Depression and had most variability in its scores.

Instead, means rose in order from Integrated to Despairing: Integrated 3.92, SD=4.01; Nonexploratory 4.61, SD=3.56; Pseudointegrated 7.5, SD=7.4; Despairing 14.5, SD=9.4.

When Despairs were included, group differences were marginally significant: F((3,93)=6.94, p=.0003, B-F(3,9)=3.37, p=.068. When Despairs were excluded, findings again approached significance: F(2,90)=3.45, p=.036, B-F(2,32)=2.41, NS.

Covariates:

6) Age

Age did not differ significantly among the Integrity statuses, although the Despairing group's mean age (79.5) was three years older than that of the next oldest group (Nonexploratory).

7) Education

Education, scored in terms of number of years of formal schooling completed, covaried almost significantly with status ratings: When Despairs were included the $\underline{F}(3,93)$ was 2.67, $p=.052$; the $\underline{B\text{-}F}(3,7)$ was 1.43, NS. When Despairs were excluded, both tests produced significant results: $\underline{F}(2,90)=4.41$, $p=.015$; $\underline{B\text{-}F}(2,57)=4.01$, $p=.02$. The Integrated group had most ($\underline{M}$=16 years), the Nonexploratory group least ($\underline{M}$=13.2 years); the Pseudointegrated group had a mean 13.36 years, the Despairing group 14. Seventy-eight per cent of the full sample fell within the range of 10.5 to 21 years' education. In group comparisons, the Integrated group differed significantly from the Nonexploratory ($\underline{q}(43)=3.87$, $p<.05$); this result held up when Despair data were removed ($\underline{q}(43)=3.87$, $p<.05$).

Univariate findings summarized:

Group differences on the Integrity questionnaire were nonsignificant, but means followed the predicted trend upward, status by status, from Despairing to Integrated. Group differences on the Openness scale attained significance in the overall ANOVA and the Integrated group

scored significantly higher than the Nonexploratory in intergroup comparisons. CPI Competence results approached significance in the ANOVA, with means following the predicted trend; intergroup comparisons between the Integrated and Nonexploratory, and Integrated and Pseudointegrated groups, were significant. Results on Perceived Health and Geriatric Depression approached significance, and means on the GDS followed the predicted pattern. Although age did not differentiate groups, education did covary with Integrity Statuses, with the Integrated group significantly more educated than the Nonexploratory in intergroup comparisons.

Multivariate analyses

Results from these analyses are summarized in Table 4.

The first multivariate analysis of variance (MANOVA) analyzed findings from the five convergent measures together, including data from Despairing subjects, but not covariate data. The $F(15, 246.09)$ was 2.59, $p=.0013$. The univariate Fs for Depression, Competence, and Openness all had probabilities lower than .01; the $F(3, 93)$ associated with Perceived Health was 2.53, with $p=.06$ (Table 4).

This MANOVA repeated, with Despairs and covariates excluded (Table 4), also attained overall significance with an $F(10, 172)$ of 2.39, $p=.011$. The Depression, Competence, Openness, and Perceived Health measures all had individual Fs with probabilities lower than .05.

Table 4: Multivariate and univariate analyses of variance, with and without Despairs Effect

Dependent Variable	WITH DESPAIRS Integrity Status			WITHOUT DESPAIRS		
	F	df	p	F	df	p
All variables simultaneously	2.59	15,246.09	.0013	2.39	10,172	.0112
Integrity subscale	1.68	3,93	NS	1.53	2, 90	NS
CPI Competence	5.25	3,93	.0022	3.25	2,90	.0434
NEO Openness	4.8	3,93	.0037	5.57	2,90	.0052
Perceived Health	2.53	3,93	.0616	3.6	2,90	.0314
Geriatric Depression	6.94	3,93	.0003	3.45	2,90	.0361

A multivariate analysis of covariance (MANCOVA), with Despairs included, attained significance with an $F(15, 240.6)$ of 2.21, $p=.0068$ (see Table 5). Again, the individual Fs for Depression, Competence, and Openness were significant; age and education combined covaried significantly ($F(10, 174)=3.18$, $p<.001$) with the convergent measures, especially Competence and Openness.

When Despairs were excluded from the MANCOVA (see Table 6) the overall F neared significance: $F(10, 168)=1.74$, $p=.076$. Age and education combined still covaried significantly with the dependent measures ($F(10, 168)=2.73$, $p<.005$), particularly Competence and Openness.

Table 5: Multivariate and univariate analyses of covariance, with Despairs included

Dependent Variable	Effect: Integrity Status			Covariates Combined (Age, Education)		
	F	df	p	F	df	p
All variables simultaneously	2.21	15,240.6	.0068	3.18	10,174	.0009
Integrity subscale	1.51	3,91	NS	1.75	2,91	NS
CPI Competence	4.97	3,91	.0031	10.8	2,91	.0001
NEO Openness	2.79	3,91	.0447	9.53	2,91	.0002
Perceived Health	2.29	3,91	.0839	.57	2,91	NS
Geriatric Depression	6.67	3,91	.0004	2.34	2,91	NS

Table 6: Multivariate and unviariate analyses of covariance, with Despairs excluded

Dependent Variable	Effect: Integrity Status			Covariates Combined (Age, Education)		
	F	df	p	F	df	p
All variables simultaneously	1.74	10,168	.076	2.73	10,168	.0039
Integrity subscale	1.29	2,88	NS	1.20	2,88	NS
CPI Competence	2.28	2,88	NS	2.28	2,88	NS
NEO Openness	2.82	2,88	.065	8.9	2,88	.0003
Perceived Health	3.22	2,88	.045	.36	2,88	NS
Geriatric Depression	3.23	2,88	.044	.94	2,88	NS

Interactions among Integrity Status, referral, and gender (Tables 7 and 8)

Additional Analyses of Covariance (ANCOVAs) included self- versus other-referral and gender as independent variables together with Integrity Status, and with age and education as covariates.

There were significant sex x referral interactions on the Geriatric Depression Scale ($F(1, 82)=7.4$, $p<.01$) and on the Competence scale ($F(1,82)=8.77$, $p<.005$). There was a main effect for referral other on the Openness scale ($F(1,82)=3.81$, $p<.05$), and an interaction between referral and Integrity Status on Openness, ($F(3,82)=3.51$, $p<.05$. These results were replicated when this ANCOVA was repeated without the Despairing subjects' data, except that there was no significant interaction of referral with the Openness data.

These interactions indicated that self-referred male subjects had higher mean Depression scores and lower Competence scores than males referred by others across all status groups; self-referred males were also higher on Depression and lower on Competence than self-referred females across all status groups.

Self-referred female subjects had a lower mean age than other-referred females, and also had higher Competence and Perceived Health scores across all status groups. Self-referred subjects across genders and statuses had a mean Openness score of 127.27, while other-referred subjects as a single group had a mean score of 117.23.

These patterns imply that self-referring male subjects were more depressed and less socially Competent than those who were other-referred, while self-referring women were younger, more socially Competent, had better feelings of subjective wellbeing, and were less depressed than other-referred females.

Table 7: Significant main effects and interactions from ANCOVAS, with sex and self- versus other-referral as additional independent variables: Despairs included

		F	df	p
CPI Competence:	Sex by Referral Status	8.77	1,82	.004
	Education	11.99	1,82	.0009
NEO Openness	Referral Status	3.81	1,82	.054
	Integrity Status by Referral Status	3.51	3,82	.019
	Age	4.28	1,82	.042
	Education	8.56	1,82	.0044
Geriatric Depression	Sex by Referral Status	7.4	1,82	.008

Table 8: Significant main effects and interactions from ANCOVAS, with sex and self- versus other-referral as additional independent variables: Despairs not included

		F	df	p
CPI Competence:	Sex by Referral Status	8.81	1,82	.0039
	Education	13.22	1,82	.0005
NEO Open-	Integrity Status by Referral Status	2.85	2,82	.064
	Age	4.18	1,82	.044
	Education	8.30	1,82	.005
Geriatric Depression	Sex by Referral Status	7.45	1,82	.0078

The relationship of Integrity status to gender

A chi square test of the relationship of IS to gender revealed a nonsignificant relationship, whether Despairs were included or not: with Despairs, X2(3)=1.65, NS; without Despairs, X2(2)=1.554, NS.

Factor analyses

Factor analyses were conducted on the convergent measures data, in a quest for an 'Integrity factor or factors.'

The first factor analysis was based on residual data remaining after the covariate data (age, education) had been partialled out from the convergent measures data using regression procedures. The correlation matrix is presented in Table 9.

This analysis produced only one meaningful factor: Eigenvalues for the first two factors were:

Factor	Eigenvalue
1	2.3323
2	.9273

The rotated varimax factor loadings on the first factor were:

CPI Competence:	.824
Geriatric Depression:	-.816
Integrity subscale:	.684
Perceived Health:	.556
Openness:	.459

This factor, comprised mainly of social Competence, low Depression, and Integrity subscale scores, links social and

personal maturity (CPI, Integrity subscale) to good current mood state. These appear to be reasonable components for an 'Integrity factor.'

Table 9: Correlation matrix from factor analysis performed on residual data

	Integrity Subscale	Geriatric Depression	CPI Competence	NEO Openness	Perceived Health	
Integrity Subscale	1.000					
Geriatric Depression	-0.486	1.000				
CPI Competence	0.408	-0.615	1.000			
NEO Openness	0.190	-0.166	.277	1.000	1.000	
Perceived Health	0.164	-0.308	.341	.211	.211	1.000

An ANOVA explored the relationship of the factor scores from this analysis to Final Ratings. When Despairs were included, the F(3, 93) was 6.6, p=.0004, and the B-F(3,9), was 3.36, p=.067. Group means and standard deviations showed that the statuses were linked with Factor 1, the 'Integrity' factor, in the predicted order:

Integrated M=.249, SD=.823

Nonexploratory M=.163, SD=.717

Pseudointegrated M=-.464, SD=1.313

Despairing M=-1.600, SD=1.743

When Despairs were excluded, the F(2, 90) was 4.06, p=.0205, and the Brown-Forsythe (2, 36) was 3.01, p=.06.

A second factor analysis was performed on all the raw data, including the covariate data (see Table 10 for correlation matrix). Two primary factors emerged, with eigenvalues as follows:

Factor	Eigenvalue
1	2.8065
2	1.2209
3	.8534

The rotated varimax factor loadings for Factors 1 and 2 were:

Factor 1		Factor 2	
Geriatric Depression:	-.817	Age:	-.789
CPI Competence:	.732	Openness:	.709
Integrity subscale:	.707	Education:	.672
Perceived Health:	.621	CPI Competence:	.440
Openness:	.258	Geriatric Depression:	-.167
Education:	.213	Integrity subscale:	.125
Age:	.105	Perceived Health:	-.037

Table 10: Correlation matrix from factor analysis performed on raw data, including covariates

	Age	Education	Integrity	Geriatric Depression	CPI Competence	NEO Openness	Perceived Health
Age	1.000						
Education	-0.256	1.000					
Integrity Subscale	-0.076	.201	1.000				
Geriatric Depression	.140	-0.216	-0.509	1.000			
CPI Competence	-0.240	.426	.446	-0.639	1.000		
NEO Openness	-0.353	.372	.247	-0.247	.415	1.000	
Perceived Health	.018	.118	.182	-0.318	.346	.216	1.000

Factor 1 here replicates the factor structure obtained in the analysis of the residuals, the 'Integrity' factor. Factor 2 comprises a different mixture of components: mainly youth, high openness, and education. This triad of variables implies a younger, more liberal, and more educated sort of subject.

Analyses of variance were performed on the factor scores from each of these two factors. When Despairs were included, the F associated with the first factor from this analysis, which replicated the 'Integrity' factor, was 6.54 (df 3, 93), p=.0097; the B-F(3, 8), was 2.99, p=.096. Means and standard deviations followed the predicted pattern:

Integrated: M=.263, SD=.839
Nonexploratory: M=.184, SD=.674
Pseudointegrated M= -.606, SD=1.327
Despairing M= -1.309, SD=1.906

When Despairs were excluded, the F(2, 90) was 6.36, p=.0026, and the B-F(2,35) was 4.57, p<.02.

A second ANOVA was based on factor scores from factor 2, whose signal components were youth, openness, and education. With Despairs included, the F(3,93) was 4.03, p=.009, and the Brown-Forsythe (3, 15) was 3.68, p=.036. Group means and standard deviations were as follows:

Integrated: M=.440, SD=1.024

Pseudointegrated: M =.20, SD=.775

Nonexploratory: M=-.282, SD=.973

Despairing: M=-.621, SD=1.169

When Despairs were removed, the F(2, 90) was 5.29, p=.0067; the Brown-Forsythe (2, 70) was 5.71, p=.005.

Summary of factor analytic findings

- The 'Integrity' factor, with the main components of Competence, absence of depression, and positive loadings on the Integrity questionnaire, emerged in both factor analyses and in subsequent ANOVAs based on factor scores.

The second factor, reflecting lower age, higher Openness scores, and more education, might be called the 'Sophistication' factor. Group means showed that the Nonexploratory group was almost as low on 'Sophistication' as the Despairing group. That is, the Nonexploratory group had the second oldest mean age after the Despairing group, was the least educated, and had the second lowest mean score on Openness after the Despairs. Mean factor scores showed that the Pseudointegrated group ranked second, before the Nonexploratory group, on 'Sophistication.' These findings support the description of this status given in the preceding sections; Nonexploratory subjects were predicted to present themselves with less social self-awareness than

Pseudointegrated subjects, while Pseudointegrated subjects were predicted to seem less ingenuous.

Discriminant analyses

Discriminant analyses attempted to predict Integrity Statuses using convergent measures and covariates as predictors. Twenty discriminant analyses were performed: Findings are summarized in Tables 11-14 and briefly below.

In the first ten analyses, the predictive equation assumed that group sizes were equal and that each subject was equally likely to be in any Status group. These analyses variously used raw data or residuals, with or without Despair data, data from all questionnaires and covariates, questionnaire data only, or data from only the two best predictor variables emerging from prior analyses.

In the second ten analyses, prior probabilities were included in the predictive equations, which meant that rates of successful classification could be compared to those expected given actual group sizes.

The conventional (and comparatively liberal) cutoff point of $F=4$ was used as a critical value for entering and removing variables from the discriminant function. Although few variables emerged as obvious 'predictors' of Integrity Statuses, findings from the discriminant analyses supported factor analytic outcomes.

As well as the Fs to Remove, Tables 11-14 present the hit rates obtained through jackknifed classifications. These

are the percentages of correct classification achieved by each analysis. Tables 11-14 also present the frequencies of correct classification expected by chance and the kappa coefficients, which express the extent to which frequencies of correct classification improve on chance expectation.

Discriminant analyses of raw data, employing the assumption that status groups have equal Ns (Table 11):

With Despair data included, with or without covariates, Depression and Openness were the strongest predictors of Integrity Statuses. With covariates included, the hit rate was 37.1%, and without covariates it was 38.1%. No Fs to Remove in these first three analyses, however, exceeded 3.996. Kappa coefficients were .078 and .088, respectively.

When only Depression and Openness were entered into the equation, the F to Remove for Depression rose above the default cutoff to 6.03, and the overall hit rate rose to 43.3% correct. The kappa coefficient in this analysis was .145.

The predictive power of these analyses improved overall when Despairing subjects' data were removed (see Table 11). Openness and Perceived Health became the strongest predictors. It makes sense that the Geriatric Depression measure should lose predictive power and be replaced by Perceived Health when the Despairs' data were removed, because the mean Depression score in the Despairing group was so much higher than that of the nearest other group

(Despairs M=14.5, Pseudointegrated M=7.5). The psychological domain of Perceived Health, which measures wellbeing, overlaps with that of Depression, so the meaning of these findings did not change dramatically when Despairs were excluded.

When only Openness and Perceived Health were entered, the F to Remove for Openness became 5.91, the hit rate rose to 46.2%, and the kappa coefficient rose to .163.

Table 11: Discriminant analyses on raw data, with hit rates: Fs are Fs to Remove at final step.

	WITH DESPAIRS			WITHOUT DESPAIRS		
	With Covariates	Without Covariates	Depression/Openness Only	With Covariates	Without Covariates	Openness /Perceived Health Only
	F	F	F	F	F	F
Integrity Subscale	.32	.37		.26	.28	
Competence	.63	.40		.24	.32	
Openness	2.55	3.67	3.96	3.31	5.20	5.91
Perceived Health	1.44	1.67		1.95	2.27	3.94
Geriatric Depression	2.05	2.22	6.03	.58	.49	
Age	.44			.70		
Education	1.79			1.66		
	Jackknifed Classification Statistics:					
Hit Rates	.371	.381	.433	.43	.43	.462
Chance Expectation	.317	.321	.337	.355	.358	.357
Kappas	.078	.088	.145	.1167	.119	.163

Analysis of residuals, based on the assumption that status groups have equal Ns (Table 12):

The first analysis of residuals, including Despair data, again showed that Openness and Geriatric Depression were the best predictors. When those two variables alone were entered, the F to Remove for Depression rose to 6.25, the hit rate was 43.3%, and the kappa was .145.

When Despair data was removed, Perceived Health again replaced Depression as the strongest predictor. When only Perceived Health and Depression were entered, the Fs to Remove were still below the cutoff, but the hit rate rose to 49.5% and the kappa to .205.

Discriminant analyses of raw data, with prior probabilities entered into the predictive equation (Table 13):

Hit rates improved when prior probabilities were inserted into the predictive equation. For instance, in the earlier analysis when group sizes were assumed to be equal, the analysis of raw data with Despair and covariate data included produced a hit rate of 37.1%, but when prior probabilities were entered, this became 50.5%. Similarly, the kappa coefficient rose from .078 to .165.

Again, when only Depression and Openness were entered into the equation, the only F to Remove to exceed the default was the one associated with Depression (F=6.03).

Table 12: Discriminant analyses on residuals, with hit rates. Fs are Fs to Remove at final step.

	WITH DESPAIRS		WITHOUT DESPAIRS	
	All convergent measures F	Depression/ Openness Only F	All convergent measures F	Openness /Perceived Health Only F
Integrity Subscale	.31		.24	
Competence	.63		.24	
Openness	2.51	2.29	3.26	3.02
Perceived Health	1.43		1.90	3.52
Geriatric Depression	2.08	6.25	.52	
	Jackknifed Classification Statistics:			
Hit Rates	.361	.433	.441	.495
Chance Expectation	.325	.336	.365	.364
Kappas	.052	.145	.12	.205

Table 13: Discriminant analyses of raw data, with prior probabilities entered: Table entries are Fs to Remove at final step

	WITH DESPAIRS			WITHOUT DESPAIRS		
	With Covariates	Without Covariates	Depression/Openness Only	With Covariates	Without Covariates	Openness/Perceived Health Only
	F	F	F	F	F	F
Integrity Subscale	.32	.37		.26	.28	
Competence	.63	.40		.24	.32	
Openness	2.55	3.67	3.96	3.31	5.20	5.91
Perceived Health	1.44	1.67		1.95	2.27	3.94
Geriatric Depression	2.05	2.22	6.03	.58	.49	
Age	.44			.70		
Education	1.79			1.66		
	Jackknifed Classification Statistics:					
Hit Rates	.505	.474	.536	.57	.538	.538
Chance Expectation	.407	.414	.422	.445	.452	.462
Kappas	.165	.102	.196	.23	.156	.14

When Despair data were removed and covariates retained, the hit rate rose to a maximum point for all the discriminant analyses, 57%, and kappa reached its maximum of .23. However, no Fs in this analysis exceeded the cutoff point. When Openness and Perceived Health were the only predictors, the F to Remove for Openness rose to 5.91, and the hit rate was 53.8%.

Analyses of residuals with prior probabilities entered into predictive equation (Table 14):

When Despair data were included, hit rates reached their lowest point in all the discriminant analyses: With all convergent measures the hit rate was 30.9% and the kappa .007. When Depression and Openness only were entered, the hit rate was 29.9% and the kappa .019, although the F to Remove for Depression still rose to 6.25.

When Despair data were excluded, the hit rates improved to 50.5%, whether all convergent measures or only Depression and Perceived Health were entered. However, the kappas for these two analyses were .12 and .046, and no Fs to Remove exceeded 3.996.

Table 14: Discriminant analyses on residuals, with prior probabilities entered. Fs are Fs to Remove at final step.

	WITH DESPAIRS		WITHOUT DESPAIRS	
	All convergent measures F	Depression/ Openness Only F	All convergent measures F	Openness /Perceived Health Only F
Integrity Subscale	.31		.24	
Competence	.63		.24	
Openness	2.51	2.29	3.26	3.02
Perceived Health	1.43		1.90	3.52
Geriatric Depression	2.08	6.25	.52	
	Jackknifed Classification Statistics:			
Hit Rates	.309	.299	.505	.505
Chance Expectation	.304	.285	.531	.481
Kappas	.007	.019	-.06	.046

Summary of discriminant analyses

When Despair data were included in the predictive equation, the analyses consistently showed that Openness and Depression were the leading predictors of Integrity Statuses. When these two variables were entered on their own, the F to Remove for Geriatric Depression rose to at least 6.03 in every analysis. The strength of Depression reflects the fact that the mean Depression score for the Despairing group was much higher than that of the next nearest group; hence, the substantial group difference on this variable improved classifications.

Perceived Health replaced Depression as a leading predictor when Despair data were removed. In these analyses, when raw data were entered, the F to Remove for Openness rose above the cutoff point to 5.91. Also, when Despair data were removed, overall predictive accuracy always improved, because the smallness and disparateness of the Despair sample meant that the classifying function had little data to work with. The best hit rate and kappa coefficient were achieved with covariate data and without Despair data.

In short, Depression, Openness and Perceived Health stood out as key variables predicting Integrity Statuses. These results seemed to bear out the findings from the factor analyses. Factor 1, the 'Integrity' factor, primarily comprised CPI Competence, low Depression, and the Integrity subscale. In the discriminant analyses, Factor 1 was represented by the Depression scale and to a lesser extent

by Perceived Health (the fourth variable in both versions of Factor 1 and the weakest variable in Factor 2), because these are measures of wellbeing or morale.

Factor 2 was the 'Sophistication' measure, whose primary components were lower age, higher Openness, and education. This factor was consistently represented in the discriminant analyses by Openness and, to a lesser extent, Education, which was always the third strongest predictor when it was included.

Discussion

Short review of findings

Although inter-rater reliabilities were only moderately strong, patterns of means on the convergent measures consistently supported Integrity status groupings. There were significant status group differences on the Openness, Competence, Perceived Health, and Depression measures in ANOVAS, MANOVAs, and MANCOVAs, but not on the Integrity subscale of the MEPSI. The Integrity subscale was one of three variables comprising an 'Integrity' factor. The status groups were also significantly differentiated in an ANOVA performed on 'Integrity' factor scores and in an ANOVA on the factor scores of the second factor, called 'Sophistication.' Group means in 'Integrity' factor scores declined in order from Integrated to Despairing. In 'Sophistication' factor scores, however, the Pseudointegrated group ranked higher than the Nonexploratory group. 'Sophistication' is distinct from, but not opposite to, Integration.

In discriminant analyses, although Geriatric Depression and Openness were the only strong predictor variables, results underlined factor analytic findings. Groups did not differ with respect to age or gender distribution, but could be distinguished by years of education. Overall, the findings encourage eighth-stage construct validation.

Discussion of findings

The first findings needing comment are the comparatively insufficient kappa coefficients, which reveal uncertain reliability across status raters. The kappa coefficient linking status assignments by Rater 1 and by SH was .47, and was also .47 for Rater 1 with final Integrity Statuses. Kappa for Rater 2 and SH's ratings was .38, and .47 for Rater 2 with Integrity Statuses. Alternatively, two of three raters agreed in 83% of cases where SH did not alter his first rating and 84% of cases when he did. This frequency of two-thirds agreement coincides with those obtained in early Identity and Intimacy research (Marcia et al., in press).

This was the first try at establishing reliability for these statuses. There may have been weaknesses in the operationalization of Erikson's constructs, that is, in the conceptualization of the key themes in the Self Examination Interview. Alternatively, either the expression of those themes in the Interview or the guidelines for assessing subjects laid down in the Raters' Manual may have been inaccurate, inadequate or misleading. The fact that the constructs were in the process of being operationalized in this manner for the first time contributed to uncertainty in all raters. This led the raters to wonder not only if they had correctly identified the Integrity status of a given subject, but whether the status category was itself defensible. For future purposes, the Manual is to be

changed, incorporating the observations of all raters. Also, dimensional scaling will be used. This means that for each domain of the Interview, each subject will be scored from one to nine on each status. For example, in the domain of 'Understanding where one's life fits into world (global and local) history,' a subject could be scored three on Integrated, four on Nonexploratory, five on Pseudointegrated, and one on Despairing. Final status assignments can then be made by averaging scores for each status over all domains. This approach to scoring is expected to improve inter-rater reliabilities because it requires raters to pinpoint their impressions much more thoroughly.

Furthermore, it may be asked whether people in their twenties and thirties can really grasp the maturity of people over 65. In the author's view, raters should themselves be Identity Achieved. However, perhaps consistently with many subjects' self-appraisals, in which they said they felt they had not changed dramatically with time, raters found that these over-65 subjects were not frequently more difficult to 'hear' or 'understand' than persons of the raters' age group. Nor did raters mention feeling out of touch or unsure because of changed historical eras; this point seems to bear out Kaufman's (1986) observation that historical events rarely played large parts in the 'themes' of her subjects' self-presentations. On the

other hand, raters will always be limited in understanding by what they are able to 'hear.'

While inter-rater reliabilities were not as strong as they might have been, clearer findings were obtained with the convergent measures. When all variables were entered together into MANOVAs or MANCOVAs, ordinary *F*s and Brown-Forsythe statistics were all significant.

The dependent variables and covariates

The Integrity subscale of the MEPSI

The Integrity subscale of the MEPSI (Darling-Fisher and Kline Leidy, 1988), also intended to be a measure of concurrent validity, was the only one of five convergent measures on which group differences were always nonsignificant in univariate and multivariate analyses of variance, although means fell in the predicted order. In discriminant analyses, the Integrity subscale's performance as a predictor variable was ineffective. This was the most recent and least validated of the convergent measures. One item is somewhat confusingly worded: "If I could live my life over, there is little I would change." The subject then responds on a scale from "Strongly agree" to "Strongly disagree." In answering positively, the subject is effectively saying, "Yes, there is not a lot I would change." This item would be clearer if it read "...there is a lot I would change."

The MEPSI questionnaire was the third of three measures comprising the 'Integrity' factor in both factor analyses, together with the Geriatric Depression Scale and the CPI Competence scale. This 'Integrity' factor seemed to combine happiness (lack of depression) with social maturity (CPI Competence). The content domain of the MEPSI subscale, addressing essentially whether the respondent's life and world are satisfying, overlaps with the domains of these other two questionnaires, as it contains items such as, "I feel at peace with my life," and, "I am disgusted by other people" (Darling-Fisher and Kline Leidy, 1988). In combination, these three variables do make up a plausible Integrity factor, if not necessarily a comprehensive one.

Openness to experience

The status groups were clearly distinguished from each other on the Openness to Experience scale from the NEO Personality Inventory (Costa and McCrae, 1985) in nine of ten analyses of variance, whether univariate or multivariate, and whether or not Despair data or covariates were included. As hypothesized, the Integrated group scored significantly higher than the Nonexploratory and the Despairing groups, although not significantly higher than the Pseudointegrated.

Openness was the second strongest of three variables, the others being youth and education, making up the

'Sophistication' factor and was repeatedly one of the best predictor variables in discriminant analyses.

Pseudointegrated subjects had a higher mean score on Openness than the Nonexploratory group, a point which evokes a similarity between Nonexploratory subjects and Identity Foreclosures. Foreclosure is one of four Identity statuses; the word describes adolescents and adults who have accepted the values and belief systems of parents or other childhood authorities without subjecting them to detached scrutiny, and who have not tried to achieve psychological separation from them. A key feature of Nonexploratory subjects is also that they have not inquired beyond the worldview they inhabited in late adolescence. Bradley (1992) found that Generative individuals scored significantly higher than Conventional subjects on Openness. The mean score on Openness for her Conventional subjects was 113.79, SD 18,37, near that of the Nonexploratory subjects here ($\underline{M}$=116.82, SD 17.82).

Foreclosed adolescents may become Conventional and Nonexploratory persons later in life. In an extension of the present research, Glenham (1992) administered the Adult Identity Status Interview, a modification of Marcia's (1966) Identity Status Interview (ISI), to forty of the same subjects (13 males and 27 females). Glenham compared Identity with Integrity status assignments; Identity status assignments in the domain of Interpersonal Relationships, one of the five content areas of the ISI, were also compared

to Integrity status assignments. Of 13 subjects considered Foreclosed overall, ten were Partially Integrated, whether Nonexploratory or Pseudointegrated; 27 subjects were non-Foreclosed, and of these, 13 were Partially Integrated. In a chi square analysis testing whether or not Foreclosed status would predict Partial Integation, results approached significance. Of 19 subjects who were scored Foreclosed in the domain of Interpersonal Relationships, 14 were Partially Integrated. Twenty-one subjects were non-Foreclosed in the Relationships domain and of these, nine were Partially Integrated; here Foreclosure was a statistically significant predictor of Partial Integration.

Among Intimacy statuses, Foreclosed, Conventional and Nonexploratory individuals would likely be Pseudointimate; the Pseudointimate person is involved in a major relationship having the appearance, but not the substance, of intimacy--a relationship lacking in emotional resonance.

Most Nonexploratory persons in the present study were or had been married, yet conveyed the idea that these relationships were placid, protecting and unchallenging. Marriage was valued, it seemed, in part because of its institutional qualities.

In Generativity research, Bradley (1992) wrote of Conventional persons that they were traditional in outlook, and resisted deviations from established values, culture or lifestyle; though sincerely concerned for others within their known communal worlds, they acknowledged little of

life beyond those worlds. These characterizations also apply to Nonexploratory persons. Foreclosed, Pseudointimate, Conventional and Nonexploratory persons may be characterized by the unexamined lives they are leading across the lifespan.

In the present study, the largest group (55%) was Nonexploratory, while in Bradley's (1992) study, the largest group (34%) was Conventional. In Intimacy research, Pseudointimate subjects have made up varying proportions of the samples (Orlofsky, Marcia, and Lesser, 1973; Orlfosky, 1976; Orlofsky and Ginsburg, 1981; Levitz-Jones and Orlofsky, 1985). It is difficult to compare these cross-stage percentages meaningfully, because there are seven Intimacy statuses, five Generativity statuses and four Integrity statuses, and because of potential cohort effects. Recent findings in Identity research show that the largest Identity status group in current youth samples is Diffused (Marcia, 1989c), whereas it was once Foreclosed (Marcia, personal communication, 1993), a finding which may reflect sociocultural changes. While a substantial number of people in any age cohort are inhabiting a conventional type of identity, it would be difficult to know how many, if any, grow beyond this psychosocial position at any later point without longitudinal research. Within such research, however, low Openness scores might be a good practical index for tracing continuity within the conventional personality.

Returning to the Pseudointegrated subjects and their performance on Openness, it is improbable that they were simply responding in a socially desirable way on the Openness scale, because as a group they were certainly more complexly involved with life than Nonexploratory people, and more open to--actively involved with--experience. It is relevant here that persons high in Openness are more likely than average to divorce, engage in lawsuits, and be demoted (Costa and McCrae, 1985). Also, the mean score of the Integrated group was still almost nine points, or about half a standard deviation, higher than that of the Pseudointegrated group, although a Tukey-Kramer t-test showed this was a nonsignificant difference.

From Interview content, it appeared that life experience in Pseudointegrated subjects was less happy, but did have more edge to it than that in Nonexploratory persons. Pseudointegrated persons had inadequate and divided personalities, with major problems of identity and relationship. Emotional growth seemed to have ceased earlier in them, and they presented less resilient selves than did Nonexploratory persons. While a small minority were more insightful than Nonexploratory subjects, these insights seemed to have arrived too late in life to have altered a conflicted history. The majority of Pseudointegrated subjects inhabited defensive systems which resisted introspection, and presented narratives about events and people which left major areas of life uncharted. Conceivably

they were driven by their problems to some further Openness. By comparison, it seemed that Nonexploratory persons had never seen a reason to be introspective. Over and over, they answered Interview questions with variants of, "I've never thought about that." It is not clear whether this obliviousness is a subtle ego defense against anxiety, or actual ingenuousness.

Since it loaded weakly on the Integrity factor, should Openness be excluded from the Integrity construct? Probably not, since Openness measures psychological differentiation, and separating this quality from Integrity would contradict Erikson's intentions. Also, apart from the effects of traumatic experiences, emotional growth is unlikely to take place without openness. The Integrated group had the highest mean score on Openness, and in ANOVAs performed on the Integrity and Sophistication factor scores, scored highest on both factors. Openness does not mean non-Integration, although it may signify an adventurousness which can exist separately from the mature life satisfaction intended by the Integrity concept.

Subjects high in sophistication and low in integration, then, would probably be Pseudointegrated; this also follows from the fact that the Pseudointegrated group had the second highest mean factor score on the 'Sophistication' factor. In the end, Openness and the Sophistication factor emerged as useful discriminant variables; sophistication certainly could be mistaken for Integration--although they need not be

separate--and the presence of this factor is helpful for clarifying a potential bias favoring the educated and articulate. Meanwhile, again, the variables composing the Integrity factor in the present study are only an initially defining set.

CPI Competence

CPI Competence was the first or second variable making up the Integrity factor, depending upon which version of Factor 1 is considered. The status groups differed significantly on this measure in seven of ten analyses of variance and covariance; the differences mainly became nonsignificant when Despair data were excluded and covariates included. This result makes sense in light of the mean for the Despair group on Competence ($\underline{M}$=27.75), compared with those of the next two groups (Pseudointegrated: $\underline{M}$=36.67; Nonexploratory: $\underline{M}$=39.57). As predicted, the Integrated group scored significantly higher than the Despairing group, as did the Nonexploratory group. When Despair data were removed, the Integrated group scored significantly higher than the Pseudointegrated group.

The CPI Competence scale has individual and social aspects, as it addresses both neuroticism in the individual ("I feel uneasy indoors") and socially-focussed maturity ("Most people make friends because friends are likely to be useful to them") (Gough, 1987). Low neuroticism and mature social responsibility are consonant with the Integration

construct. The Competence scale measures immature self-centredness versus adult responsibility in items which, for instance, propose blaming the victim ("The person who provides temptation by leaving valuable property unprotected is about as much to blame for its theft as the one who steals it") and taking a selfish view in community matters ("Only a fool would ever vote to increase his own taxes") (Gough, 1987). Seeing past egocentrism to the benefits of applying principles of universal justice is a hallmark of adult maturity. The decline in means on this measure in order from the Integrated to the Despairing group is a suitably validating piece of evidence supporting the Integrity status classifications.

Perceived Health

The Perceived Health measure was included in the study as a barometer of life satisfaction. Originally, it had been predicted that the Integrated and Nonexploratory groups would score moderately positively on this instrument, with less scatter among Nonexploratory scores. Because of their hypothesized desire to appear successful, Pseudointegrated subjects were predicted to score highest, with little scatter, while the Despairing group was expected to produce the lowest mean with most scatter. Results approximately bore out predictions concerning the Integrated, Nonexploratory and Despairing groups, but the

Pseudointegrated group produced the lowest mean score, and had the second-largest standard deviation.

Five of ten univariate and multivariate analyses of the variance in scores from this measure produced significant results when Despair data were removed, until the covariates were introduced into the analyses. When Despair data were included, results only approached significance. When Despairs were removed, the Nonexploratory group's mean score was significantly higher than that of the Pseudointegrated group. The range of group means (4.78-5.62; range of SDs, 1.08-1.41) was small, and findings from this measure alone are not striking. They are most meaningful if understood as underlining trends apparent in the Geriatric Depression Scale and the Integrity questionnaire. As a life satisfaction index, Perceived Health blends well with those two instruments, and loaded fourth on the Integrity factor.

Geriatric Depression

Because the Despairs' mean on Geriatric Depression ($\underline{M}$=14.5) was much higher than that of the next group (Pseudointegrated, $\underline{M}$=7.5), Perceived Health replaced Depression as one of the two strongest predictors in discriminant analyses when Despair data were removed. As noted, this did not much alter the meaning of the discriminant results, because the content domain of Perceived Health overlaps with that of Depression. However, the best hit rate of any discriminant analysis resulted when

Despair data were removed, prior probabilities were entered on raw data, and Perceived Health and Openness were the sole predictors. These two variables can be seen as representatives of the Integrity and Sophistication factors respectively.

Scores on the Geriatric Depression Scale reflected the separateness of the Despairing group, as its mean (14.5) was the only one above the cutoff (11) indicating mild clinical depression. Six of ten analyses of variance in Geriatric Depression scores revealed significant group differences, depending upon whether or not covariate and Despair data were included. ANOVAs and MANOVAs revealed mostly significant group differences, but when the covariates were entered and Despair data removed from the analyses, group differences became nonsignificant. When Despair data were included, there were significant group differences between the Integrated and Despairing and the Nonexploratory and Despairing groups. When Despair data were removed there was a significant difference between the Integrated and Pseudointegrated groups.

Geriatric Depression was the second or first variable in the Integrity factor, depending which factor version is considered. This scale contains several items relevant to the eighth stage: "Are you basically satisfied with your life?" "Do you worry a lot about the past?" "Have you dropped many of your activities and interests?" "Are you hopeful about the future?" "Do you think that most people

are better off than you are?" (Yesavage, Brink, Rose, Lum, Huang, Adey, and Leirer, 1983). These questions address life satisfaction, acceptance of the past, vital involvement in present and future, and acceptance of one's social role, respectively. Many of the other items restate these examples. In short, this variable contributed believably and solidly to the Integrity factor. When Despairs were included, the GDS also emerged as easily the strongest predictor variable in the discriminant analyses.

Age

Although age apparently affected some multivariate analyses, groups did not differ significantly on this variable. This finding contradicted expectation, since older age should provide more time to address eighth-stage challenges. Subjects, however, rarely engaged in life review; if, as speculated in the Introduction, Integration is best found through the qualities of the self-narrative, and if the key goal of that narrative is to retain the sense of personal continuity (Lieberman and Tobin, 1983; Kaufman, 1986; Whitbourne, 1985, 1986b), then personal change would not be expected to increase in this age period. Subjects presented rather 'the me I have always been.'

Education

Three of four univariate analyses found significant group differences in average years of education. Education was the third variable in the Sophistication factor, and the Integrated group had on average two years' more education than subjects in all other groups. This might be a problem, because,

> Each individual, to become a mature adult, must to a sufficient degree develop ...ego qualities...so that a wise Indian, a true gentleman, and a mature peasant share and recognize in one another the final stage of integrity (Erikson, 1963, pp. 268-269)

Education probably does help psychosocial growth; the problem is whether the Self Examination Interview and Rating Manual would fail to recognize the Integrated qualities of the 'wise Indian.' Although education loaded only sixth of seven variables in the Integrity factor, future researchers should keep this question in mind.

There were no significant relationships between gender and status group.

Some analyses of covariance included self- versus other-referral and gender as independent variables. Whether or not Despair data were included, men who self-referred for the study were less educated and scored lower on Competence than those referred by others; self-referring women scored

higher on Competence and were better educated than other-referred women. It is possible that men responding to the advertisement had fewer resources, and were seeking nurturance through participation, while self-referring women had opposite, stronger qualities, and viewed participation as an engaging project. The advertisement began,

> TELL YOUR STORY!
> Volunteers aged 65 and up are sought for a study on older people's thoughts and feelings about aging and on how attitudes and beliefs have changed, if at all, with the years...

and perhaps implicitly offered an empathic ear while requesting confidences. This selection bias should be monitored in future research.

The 'Integrity' and 'Sophistication' factors

The 'Integrity' factor comprised, first, CPI Competence, measuring neuroticism and social responsibility; low scores on Geriatric Depression, which asks a number of Eriksonian questions concerning present mood and general outlook on life; and the Integrity subscale, which measures individual contentment and balanced reconciliation in the person. The Integrity subscale also taps a sense of social belongingness, for example: "I feel that I have the wisdom and experience to be of help to others" (Darling-Fisher and

Kline Leidy, 1988). This was a believable first group of facets for an Integrity factor.

The 'Sophistication' factor's components were lower age, higher Openness, and more years of education. The Integrated group had the highest mean scores, followed by the Pseudointegrated, Nonexploratory, and Despairing groups, in ANOVAs on the factor scores of both factors. This finding provided further clarity about the Integrity statuses and broadened the construct's nomological network; it meant that sophisticated qualities need not necessarily be treated as misleading distractors from 'true' integration. However, this finding also raises the question whether the Self Examination Interview Manual is biased against nonurban, older and less educated subjects. Alternatively, if it is, it may be that CPI Competence, Openness, Perceived Health, and Geriatric Depression are too.

Thoughts on the statuses

The following section gathers subjective amd empirical observations on the four Integrity statuses.

Integrated subjects

As a group, Integrated subjects enjoyed robust, competent and sensitive functioning; it was not difficult for raters to believe that these persons had successfully answered the challenges of earlier psychosocial stages. They were highly curious about and much involved with the world,

without being driven. They were likeable, engaging, fair-minded, open, reasonable and responsible. Interpersonally they seemed satisfyingly connected to friends and family, and were neither isolated or needy. None betrayed major anxiety about aging. Few were particularly philosophical by temperament, but Integrated subjects were neither surprised by, nor incompetent to answer, questions with philosophical components.

Psychometrically, these subjects scored highest on the Integrity subscale, the CPI Competence scale, the Openness scale, and the Perceived Health measure, and lowest on Geriatric Depression. They were, on average, almost five years younger than the Despairing group, and generally were better educated than subjects in the other three groups. A nagging question for future research is whether or not these subjects are more intelligent than the others.

Nonexploratory subjects

Persons in this status were pleasant, reasonable, and extraverted. Their concerns centred most often on relationships with family and social circles, which were interesting and gratifying to them. Hobbies and pastimes tended not to have investigative aspects. Life and people were more to be accepted than to be researched. As a group, Nonexploratory persons were contented rather than inspired. They displayed a mild but stubborn insistence on their complacency. Why review the good-enough life? Because they

seemed nonintrospective, they were unlikely to be approached by other people as counsellors, despite being caring and supportive.

Psychometrically, they 'came second' after the Integrated group on all the convergent measures except Openness, which was discussed above. With reference to age and education, they were in the middle ranges of the sample.

Pseudointegrated subjects

Persons of this group were far more unique and unlike each other than people in the Nonexploratory group. However, this would not be a prized uniqueness. It was common to see unresolved anger, divided selves and disavowal of problems in them. These subjects could also be needy, defensive, ambivalent and dogmatic. Many used projection extensively and a few had been repeatedly taken advantage of. In general, these persons had failed in resolving the challenges of the Identity, Intimacy and Generativity stages. They were close to few people in their lives and often were very preoccupied with interpersonal problems while denying this preoccupation. They laughed less easily and conveyed less sense that they enjoyed life than did Integrated and Nonexploratory subjects.

Psychometrically, they also were less satisfied with life or happy than subjects in the two previous groups, as indicated by scores on the Integrity subscale, the Perceived Health, and the Geriatric Depression scales. They were more

neurotic and less socially responsible than those subjects, as measured by CPI Competence.

Despairing subjects

As a group, Despairing subjects were notable primarily for the lack of hope in their worldviews. One subject was clinically depressed; a second inhabited a childish and painfully constricted construct system; a third was predatory and passive-aggressive; the fourth was gloomily detached and pessimistic. Emotionally, day-to-day survival appeared to be the highest goal in these subjects' lives. The smallness of this group may, of course, have been a good thing, which showed that most people adjust with at least partial success to life. Erikson et al. (1986) said that few subjects in their sample were Despairing. Similarly, fewer Identity Diffusions have been identified as cohorts grow older (MacKinnon, 1993; Marcia et al, in press). These observations would support psychosocial theory, in that living longer provides more opportunity to resolve each stage's challenges:

> ...the more choices the individual is aware of and makes [while growing older], the more enhanced his sense of a real and continuous "I" should be, and the more validation he/she should be able to garner for his/her life, while experiencing less dread of non-existence. Actualized choices, as Erikson (1959) and Marcia (1964) both agree, are also the only means by which a self-identity can be formulated. (Glenham, 1992, p. 21)

Of course, it may also be that the small size of the Despairing group was simply an artifact of sampling.

This group scored lowest on all the convergent measures except Perceived Health, where it scored second lowest (see Table 2). Of particular note is its mean Openness score, despite a wide standard deviation: M=104, SD=26.5. The mean and standard deviation of the closest other group, Nonexploratory, was 116.82, SD 17.82. The finding of low Openness in this group supported the characterization of these subjects in the Integrity Status Interview Rating Manual, which says that they have never grown past templates and attitudes acquired in childhood.

Is there psychosocial development in old age?

As stated, subjects in this study rarely engaged in the life review process postulated by Erikson (1975) and Butler (1963). It is hypothesized, instead, that statements made in the Self Examination Interview were self-presentations which excerpted the self-narrative, whose purpose is to maintain a

sense of continuity in life (Lieberman and Tobin, 1983; Kaufman, 1986; Epstein, 1973; Whitbourne, 1985). Many subjects, for instance, said they felt like the same person they had always been, and that old age was consequently a somewhat unreal experience.

Many said aging was not of especial concern to them. When asked, almost half reported faith in an afterlife, but otherwise, subjects virtually never expressed fear of death, and actually, almost never mentioned death.

It might be that individuals in the Moratorium phase of the Identity struggle feel pressured to resolve the problems of that stage because of the impending requirements of adulthood, while elderly people do not feel the same kinds of pressures to prepare for the future. In this way, it could be that the life review is more developmentally optional and internally driven when it does occur in old age (Marcia, personal communication, 1993).

Life review was supposed to mean that in old age, one would catechize the life and look for ways to validate and comprehend it; instead, the author saw these subjects preserving continuity: I am who I have always been. Presumably, maintaining continuity helps the person feel in control of his or her life; the sense of sameness is reassuring and validating at a time when the security of the self is threatened by age. Continuity may also help in the denial of death. In these ways, old age may be a less

suitable time than any for deconstruction of the life history.

An "existential immortality" (Erikson, 1982, p. 14) may also be claimed through the assertion of the continuing self. In this perspective, the Integrity status rater's goal is to gauge the resonance, depth, connectedness and meaningfulness of the person's self-presentation. Meanwhile, the key qualities of the self-narrative may be considered Integrated, and yet may not have changed in many years: The individual might have been assigned the Integrated status at an earlier stage of life. Could all this mean that most people do not continue with psychosocial development in old age?

Part of the problem might be that the 'Integrity' concept tends to contain mythic-heroic overtones, while the persons being interviewed are ordinary citizens. Still, according to Erikson, Integration can occur only in a person who has successfully resolved all the earlier stages. Indeed, there were a number of non-Integrated subjects who raters did consider to be Identity Achieved; these persons had failed at Intimacy, Generativity, or both. This point is important because it shows that people considered Integrated had progressed beyond Identity Achievement.

Perhaps younger people who are Identity Achieved could be considered Integrated according to present criteria. They would lack only the depth and breadth of maturity that an

older, Integrated person acquires through Intimacy and Generativity.

What about Wisdom?

Wisdom is the 'virtue,' or cardinal quality, associated with the eighth stage (Erikson et al., 1986). Could anything about wisdom be learned in the present study? Specifically, for example, could Integrated subjects be considered wise? Reviewing ways in which their sample of elderly interviewees had developed wisdom, Erikson et al. (1986) saw that people reconciled formerly conflicted feelings, beliefs, and perceptions, and shifted from personal to more universal perspectives. These observations came from interviews with persons and offered broad guidelines for understanding wisdom.

With regard to Integrated subjects in the present study, it was the author's tentative belief that only a minority were 'wise,' if wise meant something more than a generally robust, competent and sensitive functioning in life. While many subjects reported that their views had matured and diversified somewhat with time, how to determine whether this meant wisdom, or simply usual life learning? If the latter, would this be adequate for Erikson's 'wisdom?'

Holliday and Chandler (1986) described a study exploring the meanings of wisdom as this term is understood by adults in daily life. After reviewing classical and contemporary views on wisdom, they factor analyzed ratings

of adjectives nominated by subjects in response to keywords, including 'wise,' 'shrewd,' 'intelligent,' 'perceptive,' 'spiritual,'and for opposite contrast, 'foolish.' The findings combined the ideas of young adult, middle aged, and elderly subjects with those from writers on wisdom to produce a group of living meanings for that construct.

A principal components analysis produced a five-factor constellation of meanings for wisdom. The factors were: Exceptional understanding of ordinary experience, Judgement and communication skills, General competencies, Interpersonal skills, and Social unobtrusiveness. The authors concluded that

> ...it is legitimate to view wisdom as a marker of progressive psychological change during adulthood...wisdom may be profitably thought of as a well-defined human competency, rooted in and marked by clearly defined psychological abilities. (Holliday and Chandler, 1986, p. 77).
>
> 'Wisdom,' unlike the other categories considered, is especially complex and describes people who have demonstrated an integration of basic psychological skills within a socially defined framework (Holliday and Chandler, 1986, p. 82).

(The second comment is reasonably Eriksonian). The authors

feel that these conclusions are not highly surprising, given the ages-old history of the wisdom concept. The wisdom construct they located was also broader and more detailed than others presented in the psychological literature (Clayton and Birren, 1987; Brent and Watson, 1980; Dittman-Kohli and Baltes, 1985; Meacham, 1983). Drawing on Habermas (1970), they suggest that this wisdom concept partakes of techical, practical, and emancipatory types of knowledge. In future, this model of wisdom could be quite helpful for examining the qualities of integrated maturity in a more fine-grained way.

Avenues for future research and concluding remarks

There are many potential directions for future study. Inter-rater reliabilities must, of course, be improved. It has already been mentioned that investigators should monitor the potential biasing effects of greater education, of self- versus other-referral, and of intelligence. It would also be useful to use the Washington University Sentence Completion Test (WUSCT; Loevinger, 1976), which assesses progressive ego differentiation. For Loevinger, the person's efforts to master, to integrate, and to make sense of experience are the essence of the ego (Loevinger, 1969); this is the ego we mean when we allude to character development, interpersonal relations, conscious preoccupations and impulse control (Loevinger, 1966; Vaillant, 1977). Although the highest ego level measured by this instrument is called 'Integrated,'

only one per cent of the population is expected to attain this level. However, Integrated subjects in psychosocial research should more often reach the more advanced levels of ego development on this instrument. The link between stressful life events and psychosocial development was investigated by Samson, Reznikoff, and Geisinger (1985); this link is of interest because major life events are considered one of the ways in which personal growth is triggered. Integrated subjects should also support more terminal than instrumental values on Rokeach's Value Survey (1973).

Saulnier (1992) defended a dissertation proposal in which he plans to study the relationships of four new convergent measures to the Integrity statuses. The first is the Social Paradigm Belief Inventory (Kramer, Kahlbaugh, and Goldston, 1992); this is an objective forced-choice measure of formistic/mechanistic (analytic) thinking and relativistic/dialectical (synthetic thinking). Dialectical reasoning is hypothesized to provide a better fit to the social world, because it regards situations as subject to ongoing change. Saulnier will also use Kohlbergian measures of moral development, including the Heinz and one other dilemma (Colby and Kohlberg, 1987), and may perhaps extend the finding that Identity development is correlated with moral development (Marcia et al., 1982). Templer's Death Anxiety Scale (1970) is a logical third choice because the eighth stage is concerned with the individual's ability to

validate life experience in the face of death. Lastly, the Intolerance of Ambiguity Scale (Budner, 1962) will assess subjects' cognitive flexibility and ability to "be open to considerations they used to view as incompatible" (Erikson et al., p. 60).

In the author's opinion, more knowledge is needed about the specific qualities of the Integrated person and his or her maturity. Particularly because Holliday and Chandler's (1986) wisdom construct was generated in the main by ordinary people, it seems that these findings could be usefully applied to the understanding of subjects in Integrity research. Much might be learned about what levels and kinds of maturity and wisdom are attained, beyond the general robustness of character mentioned earlier.

The most urgent question of all posed by present results, is whether, and if so how, ego development--change--can be observed to occur in later life. The simplest way to investigate this would be through a cross-sequential research design which followed different cohorts longitudinally through at least two psychosocial stages each. If change can be shown to occur, it would be important to learn what motivates it.

For the long term, if Integrity status classifications continue to emerge reliably in repeated studies, these classifications might eventually be of use in psychotherapy with elderly persons, as the Identity status classifications are at present with young adults (Archer, in press).

This study concerned validation of a measure of eighth-stage constructs, and contributed thoughts on one facet of those constructs, where a different way of conceiving the life review was discussed. First results have supported the Integrity status classifications, and prepare a platform for future research. To learn what these findings could mean in the larger picture, more knowledge is needed about how status classifications can be connected to other personological and developmental characteristics. It is not known what best questions will flow from these results. Nevertheless, something was added to existing knowledge about character in the last years of life.

By not bringing up life's finality, subjects talked only obliquely about the meanings of their lives. This apparent denial, however, need not be thought of as anti-Eriksonian. Instead, believing that the self will carry on indefinitely makes emotional sense when the person knows that he or she has responded with heart to the challenges of individuation and belongingness; because the mastery of adulthood really is heroic.

APPENDIX A

SELF EXAMINATION INTERVIEW

Self Examination Interview

Goal is to place each subject in one of 4 statuses:

I. Integrated
II. Partial integration: Nonexploratory type.
III. Partial integration: Pseudointegrated type.
IV. Despairing.

Integrity vs. Despair is the last pair of polarities in Erikson's scheme because, though integrity is always essential for living a satisfying life, retirement years are the last time one has to confront the question of, and to do something about, one's integrity. Having had a career and/or having raised a family by the end of middle age, how far can you actually stand behind it all? Did you really mean it? What made you do it all? These questions carry more significance at the end of life than at any other time.

The Interview questions cover five attitude domains:
A. Engagement in one's own life review in retirement years.
B. Understanding where one's life fits into world history (global and local).
C. Being a leader and mentor/Defending group values against threat.
D. The things one would die for, if any; views on the afterlife.
E. Ability to feel comradeship with people of other times, places and pursuits.

Self Examination Interview questions:
[the theoretical principles behind the questions are contained in square brackets].

A. [Engagement in life review during retirement years.]
I'd like to talk to you about some of the ways you have changed, if you have changed at all, from how you were in earlier periods of your life.
Have your physical strength and appearance changed much in the past 20 or 30 years? [assume yes]
How do you feel about that change?
Probe: Is there anything that makes up for that change?
Do you find that the things you considered most important in life in your early years have changed at all? If so, how?
Do you ever look back over your life, to make sense of how it has gone?
Do you feel there's any value in thinking over how your life has gone? If so, why? If not, why not?

B. [Understanding where one's life fits into world (global and local) history:

If you think back over your life as a whole, does it all make sense to you? Can you see why things went the way they did?
Probe: Is there anything in particular that helps you to understand it all when you look back?
How do you expect you will be remembered in the world? How do you feel about that?
Do you have a religious faith, or a philosophy of life?
What things are most important to you now?
Are there any special leaders or famous figures that are your personal heroes, that you especially look up to? What is it about that person [those people] that matters to you?
Is there anyone from your own life who you think of as a teacher or a guide or as someone to look up to?
Are there any ideals or movements, big or small, (social, political, economic) which have been especially important to you? [formerly 'Are there special ideals or movements in the world, (social, political, economic) or more locally in your community, which have been important to you and how you live?']

C(i). [Being a leader and mentor.]

Do you feel that you have more to offer to the people around you now? Less?
Probe: in what ways? Do you feel that you are any more or less important to other people--in any sense?
As an older person, do you sometimes feel that you would like to pass on to others some of the understanding that you have gained over the years?

C(ii). [Defending group values against threat.]

Overall, how do you feel about how your life has gone?
Probe: Overall, do you feel that your life is going the way you had originally hoped it would?
Have you done, or are you doing, the things you wanted to?
What kind of thoughts do you have about your future?
Have you ever felt that life was not worth going on with? What happened/ what did you do about that? How long was it before it all made sense again? [If not], is there anything that could make you feel that way?
What has been the hardest thing for you to adapt to in the last few years? How did you handle that?
I would imagine that you have lost some people who were quite important to you. What was the hardest loss? How did you cope with that?
What sort of place does the world seem to you now?
Probe: How has the world situation changed since you were young?

And your views on it? What about your community? How do you feel about that?

D. [The things one would die for (if any); views on the afterlife.]

Is there anything you would be willing to die for?
[addition:] Is there anything that is so important to you that you'd risk compromising your health, freedom, or wellbeing to preserve it?
For instance, are there wars you'd have felt it was worthwhile to fight in, or to send your children to? Would you put yourself out to defend the rights of minority groups?
Probe: Have your thoughts on such things changed over time?
What do you believe happens to you after death? Is this very important to you?

E. [A sense of comradeship with people of distant times, places, and pursuits.]

Have you travelled much away from this area? Gone to other continents, or lived in foreign cultures? Have you read or thought about life in past times and faraway places?
Probe: Do you see life in different times and places as being very different from the life you've had? In what ways? Similar? How? From what you've seen of people over your lifetime, how different would you say they are from one another?
Probe: What kind of things do you feel people have most in common?
Do you believe that in the end it is possible for people really to understand each other? That is, their beliefs, feelings, the reasons they do the things they do?

F. [In case the following questions have not yet been covered]

What kinds of things are important in your life now? How is that different from the way it was 20 or 30 years ago? Before that?
Probe: What caused that change?

APPENDIX B

INTEGRITY STATUS RATING MANUAL

Integrity Status Rating Manual

Integrity status profiles:

General Note: Integrity Status ratings are concerned with each subject's maturity as a basic dimension. Maturity is considered from two sides. First, personal maturity--what is the depth and resonance of the person's character when s/he stands alone--and second, social maturity. This includes his/her sense of social responsibility, understanding of other people's characters, and realistic comprehension of social dynamics.

Another important dimension is that of ego strength. This means generalized self-assurance, founded on reasonably good self-knowledge. In the Integrated person, this generalized self-assurance would mean s/he could eventually be comfortable among humans anywhere--could learn and accept the group and have satisfactory social relationships in that new group. S/he might even attain honors in that group. A Nonexploratory person might also be able to do this but would never entirely lose the feeling "that's not how we do it at home, so I'm not sure I can adjust." The Pseudointegrated person transplanted to another culture will find a workable corner of it to survive in but would not be able to achieve hero status due to some basic failures in perspective taking. The Despairing person would retreat and give up due to pervasive rigidity and/or inadequacy of character. Essentially, the last section of the Interview, concerning "Comradeship with people of other places and times," is concerned with how well the S understands and is comfortable with other humans. Further, it is important to note that ratings could probably not be made in most cases if interviews were merely transcribed onto paper. Individuals of all statuses may give similar responses to questions; rater must assess based on overall presentation.

Key Scoring Dimensions: In scoring Interview responses, listen for following qualities: The more they are in evidence, the higher the response is rated.

1. Degree of Conscious Commitment:

The person is able to make himself clear to the interviewer because his own attitudes and values are clear to him. The person also understands why he values these things. He can define what is unique about his social-familial-occupational group and is happy with how he belongs

to it. The overall worldview is sensible, practical and ethical. The person lives up to, and lives by, strong personal values.

2. Continuity from Beliefs to Actions

The individual is well engaged with a few main personal concerns. The value system is clearly a source of choices and actions in daily life. Self-presentation is plausible and consistent: She can be counted on to say what she will do and do what she says. She is reliable and has a nondefensive frankness. She has ongoing attachments with close others, and intends to carry on 'doing more' in life.

Integrated Status:

Reasonable

Sane

Fair

Solid citizen

Has thought things over and freely takes a position on most questions

Not ridiculous, possesses dignity

Dominant vocal tone will not be unpleasant to listen to. That is, it will not be plaintive, scratchy, whiny, childlike, or gloomy.

Rater feels that with the appropriate legal training, person could be trusted as a judge in court

Reasonably strong interest in understandable, generative activities

Curious to learn more in life

May be occasionally dogmatic, whiny, rigid (i.e., rater should not idealize Integrated status), but not so much as to overshadow a general reasonableness

Civilized, aware and tolerant of more than one side of issues

Look for wisdom

Can afford to be a good sport

I'm ok-you're ok

Rater does not have to assess Subject's status in regard to previous Eriksonian stages, but it should be at least imaginable that the Integrated person has resolved them successfully

More openminded than not

Thinks for self

Not too afraid of being alone

Rating can even include major failings in one area of life,

such as relationships, a degree of whininess, or cultural narrowness. In such cases, 'bargaining in good faith' still garners the S the rating--s/he has overall basic decency, reasonabless

Good will toward the world

Not guilt-ridden, depressed, or cripplingly anxious

When it comes to counselling others, there should be recognition that this is a reciprocal process: person is as open to being helped as to helping

Sense of humour is healthy

Not necessarily intellectual but conscientious and reliable

Would be a fair, honest, useful and respectful counsellor

Not necessarily paragons--just pretty good people

Purposeful

Reflective, strong, generally resilient, well rounded

Self-respect healthy

Engaged with life

Realistic despair can be evident and may be a strong point in their presentation as evidence of deep feeling and caring, as long as it is not the dominant note and so long as rater does not feel the person is defeated

Has thought about who I am, how I got this way, and is still overall in favour of self and world

Need not be deeply introspective, but a reasonable degree of selfawareness

Has a scope beyond community/neighborhood: not necessarily a deep understanding of cultural/historical trends

Ten years on a desert island with this person would be interesting enough

Partial Integration, Nonexploratory type:

The maturity that is present has come to the person mostly through just having lived life rather than through active personal search for meaning

Interview not terribly memorable

Views basically banal

Basically conventional

Intellectually stodgy

Dignity is there but is not impressive

Can afford to be a good sport

I'm ok--you're ok, I guess

Despite S's apparent contentment rater may wonder about resolution of previous Eriksonian stages

Often parochial--has not moved very far beyond the imagined boundaries of the world as s/he viewed it in late adolescence

Reasonable, fair, but not actively curious

Views lacking in critical edge

Not deeply engaged by intellectual activity

Protective of a conventional lifestyle (possibly cannot explore beyond it due to anxiety)

Not actively introspective

May have patches of insight but has come upon these too late or has not generalized them to enough areas of the life. One may sense defensive reasons for such a protracted lack of psychological sophistication

Views may have a scolding quality at times

'Life is but a dream'

Lack of passion, not deeply engaged with or curious about people or anything else

May enjoy people in a cheerful, nonreflective, extroverted way

Instincts are good enough that they could be trusted, but not philosophical enough to be a judge in court

'Nice' in a bland sense

Not generally lonely, but afraid of lonely

Not very much self-consciousness

Not inspiring, and not someone you'd rush to for counselling, because seems too unsure or unaware of own ground

Ten years on a desert island with this person would be boring

Partial Integration, Pseudointegrated type

Still attempting to make the world fit simplistic, banal, inadequate templates acquired in childhood.

Unexamined, unintrospective adherence to beliefs, outlooks and attitudes acquired back then. Doesn't connect why or how these may be connected to how things have gone for him/her, or has done little about the connection.

The word 'dignity' would not come to mind

Similar to Despairing Ss, but not so depressed or fatalistic, because has never learned not to believe in this core childhood self.

Self-deceived. Proffers simplistic, dogmatic beliefs, self-statements, views.

Immature, incomplete.

Cannot always afford to be a good sport

Failure to comprehend and/or deal with the distances between hopes, wishes, actualities. Does not acknowledge these distances often. Quite mystified.

Has many gaps in understanding of other people; consistently notes poor, unsatisfying, unreconciled relationships.

Routinely denies that things have turned out badly overall.

To some extent, victims.

The person S thinks s/he is and the person s/he wants to be are not the persons the rater perceives. Thus, disjunction.

Needy.

Stuck: unable to imagine changing, does not recognize the possibility or the need.

Not very happy; much rockier history than Nonexploratory person's.

Personality structure would probably fragment somewhat if the person spent too much time alone.

Ten years on a desert island with this person would be annoying, irritating, difficult, disappointing.

Despairing status:

Keywords are defeat and confusion.

Person is not happy and does not pretend to be.

Cannot always afford to be a good sport

Seems to have rarely had much direction; seems not to have understood people or situations adequately. Alternatively, may have good insights, but has not been able to put them to good use; seems helpless and ineffectual, with or without anger.

Depression may be evident.

Personal dignity is gone, they don't know where.

Whether they counsel others or others counsel them, Despairing persons do not see this counselling as a reciprocal process

Seems to be mired in nonresolution of early Eriksonian stages

Tends not to consciously realize presence of his/her own despair, but does little to dispel rater's impression that it is there.

Pseudointegrated person may have more bright spots in presentation; there is more continuity to the sense of self, that is, a more cohesive core personality emerges. Like the Despairing person, the pseudointegrated person is fragmented, but not as much, and will do more to deny dissatisfaction. Where Pseudointegrated person holds on stubbornly to a few guidelines for life appropriated in childhood, Despairing person has a less firm grip on his/her few guidelines, or doubts them more, without replacing them with anything convincing.

Integrated and Nonexploratory Ss are about equally happy; Pseudointegrated persons can be partially happy; Despairing persons are rarely happy.

Someone who has searched in life for meaning and satisfaction, who has bargained in good faith, but has still failed to put it all together, would not rate Despairing so long as rater does not sense pervasive defeat and confusion. That is, it is not so much a question of how well S has succeeded as of how much conscious faith s/he has in him/herself: Despairing S has little.

Ten years on a desert island with a Despairing person would make you consider despairing

Despairing person will fragment when alone

APPENDIX C

INTEGRITY SUBSCALE FROM THE MODIFIED ERIKSONIAN PSYCHOSOCIAL INVENTORY

How often is this true of you?	Hardly Ever True	Occa-sion-ally True	About Half The Time	Usual-ly True	Almost Always True
I feel that I have the wisdom and experience to be of help to others.	1	2	3	4	5
As I look over my life, I feel need to make up for lost time.	1	2	3	4	5
My achievements and failures are largely a consequence of my own actions.	1	2	3	4	5
I have many regrets about what I might have become.	1	2	3	4	5
I am disgusted by other people.	1	2	3	4	5
I am afraid of growing old.	1	2	3	4	5
If I could live my life over, there is little I would change.	1	2	3	4	5
There's a lot about my life I'm sorry about.	1	2	3	4	5
As I look back over my life, I realize my parents did the best they could for me.	1	2	3	4	5
I feel at peace with my life.	1	2	3	4	5

APPENDIX D

OPENNESS TO EXPERIENCE SCALE FROM THE NEO PERSONALITY INVENTORY

	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
I would have difficulty just letting my mind wander without control or guidance.	SD	D	N	A	SA
Aesthetic and artistic concerns aren't very important to me.	SD	D	N	A	SA
I seldom notice the moods or feelings that different environments produce.	SD	D	N	A	SA
I'm pretty set in my ways.	SD	D	N	A	SA
I often enjoy playing with theories or abstract ideas.	SD	D	N	A	SA
I believe letting students hear controversial speakers can only confuse and mislead them.	SD	D	N	A	SA
I don't like to waste my time daydreaming.	SD	D	N	A	SA
Certain kinds of music have an endless fascination for me.	SD	D	N	A	SA
Without strong emotions, life would be uninteresting to me.	SD	D	N	A	SA
I think it's interesting to learn and develop new hobbies.	SD	D	N	A	SA
I enjoy solving problems or puzzles.	SD	D	N	A	SA
I believe we should look to our religious authorities for decisions on moral issues.	SD	D	N	A	SA
I try to keep all my thoughts along realistic lines and avoid flights of fancy.	SD	D	N	A	SA
I am intrigued by the patterns I find in art and nature.	SD	D	N	A	SA
I find it easy to empathize--to feel myself what others are feeling.	SD	D	N	A	SA

	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
If I feel my mind starting to drift off into daydreams, I usually get busy and start concentrating on some work or activity instead.	SD	D	N	A	SA
Watching ballet or modern dance bores me.	SD	D	N	A	SA
I experience a wide range of emotions or feelings.	SD	D	N	A	SA
I prefer to spend my time in familiar surroundings.	SD	D	N	A	SA
I have little interest in speculating on the nature of the universe or the human condition.	SD	D	N	A	SA
I consider myself broad-minded and tolerant of other people's lifestyles.	SD	D	N	A	SA
I enjoy concentrating on a fantasy or daydream and exploring all its possibilities, letting it grow and develop.	SD	D	N	A	SA
Poetry has little or no effect on me.	SD	D	N	A	SA
I rarely experience strong emotions.	SD	D	N	A	SA
On a vacation, I prefer going back to a tried and true spot.	SD	D	N	A	SA
I have a lot of intellectual curiosity.	SD	D	N	A	SA
I think that if people don't know what they believe in by the time they're 25, there's something wrong with them.	SD	D	N	A	SA
As a child I rarely enjoyed games of make believe.	SD	D	N	A	SA
I enjoy reading poetry that emphasizes feelings and images more than story lines.	SD	D	N	A	SA
How I feel about things is important to me.	SD	D	N	A	SA

	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
I like to follow a strict routine in my work.	SD	D	N	A	SA
I enjoy working on "mind-twister" type puzzles.	SD	D	N	A	SA
I believe that the different ideas of right and wrong that people in other societies have may be valid for them.	SD	D	N	A	SA
I have an active fantasy life.	SD	D	N	A	SA
Sometimes when I am reading poetry or looking at a work or art, I feel a chill or wave of excitement.	SD	D	N	A	SA
I seldom pay much attention to my feelings of the moment.	SD	D	N	A	SA
Once I find the right way to do something, I stick to it.	SD	D	N	A	SA
I find philosophical arguments boring.	SD	D	N	A	SA
I believe that laws and social policies should change to reflect the needs of a changing world.	SD	D	N	A	SA
I have a very active imagination.	SD	D	N	A	SA
I am sometimes completely absorbed in music I am listening to.	SD	D	N	A	SA
I find it hard to get in touch with my feelings.	SD	D	N	A	SA
I often try new and foreign foods.	SD	D	N	A	SA
I sometimes lose interest when people talk about very abstract, theoretical matters.	SD	D	N	A	SA
I believe that loyalty to one's ideas and principles is more important than "open-mindedness."	SD	D	N	A	SA

I follow the same route when I go someplace.	SD	D	N	A	SA
I have a wide range of intellectual interests.	SD	D	N	A	SA
I believe that the "new morality" of permissiveness is no morality at all.	SD	D	N	A	SA

APPENDIX E

COMPETENCE SCALE FROM THE CALIFORNIA PSYCHOLOGICAL INVENTORY

1. Our thinking would be a lot better off if we would just forget about words like "probably," "approximately," and "perhaps."	T	F
2. I liked Alice in Wonderland by Lewis Carroll.	T	F
3. Several times a week I feel as if something dreadful is about to happen.	T	F
4. There's no use in doing things for people; you only find that you get it in the neck in the long run.	T	F
5. I tend to be on my guard with people who are somewhat more friendly than I had expected.	T	F
6. I think I would like the work of a school teacher.	T	F
7. Most people would tell a lie if they could gain by it.	T	F
8. I hate to be interrupted when I am working on something.	T	F
9. Maybe some minority groups do get rough treatment, but it's no business of mine.	T	F
10. I don't like to undertake any project unless I have a pretty good idea as to how it will turn out.	T	F
11. Once a week or oftener I feel suddenly hot all over, without apparent cause.	T	F
12. Sometimes I think of things too bad to talk about.	T	F
13. The idea of doing research appeals to me.	T	F
14. People today have forgotten how to feel properly ashamed of themselves.	T	F
15. Sometimes I have the same dream over and over.	T	F
16. I do not dread seeing a doctor about a sickness or injury.	T	F
17. It takes a lot of argument to convince most people of the truth.	T	F
18. Most people make friends because friends are likely to be useful to them.	T	F

19. It is hard for me just to sit still and relax. T F

20. Parents are much too easy on their children nowadays. T F

21. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it. T F

22. I certainly feel useless at times. T F

23. Criticism or scolding makes me feel very uncomfortable. T F

24. I read at least ten books a year. T F

25. I frequently notice my hand shakes when I try to do something. T F

26. I am sometimes cross and grouchy without any good reason. T F

27. Teachers often expect too much work from the students. T F

28. I often act on the spur of the moment without stopping to think. T F

29. I commonly wonder what hidden reason another person may have for doing something nice for me. T F

30. Most people are secretly pleased when someone else gets into trouble. T F

31. Only a fool would ever vote to increase his own taxes. T F

32. Most people are honest chiefly through fear of being caught. T F

33. I very much like hunting. T F

34. Most people inwardly dislike putting themselves out to help other people. T F

35. I feel uneasy indoors. T F

36. People pretend to care more about one another than they really do. T F

37. People don't need to worry about others if only they look after themselves. T F

38. Sometimes I just can't seem to get going. T F

39. The person who provides temptation by leaving valuable property unprotected is about as much to blame for its theft as the one who steals it. T F

40. I am often bothered by useless thoughts which keep running through my mind. T F

41. I must admit that I have a bad temper, once I get angry. T F

42. When prices are high you can't blame people for getting all they can while the getting is good. T F

43. I often feel as though I have done something wrong or wicked. T F

44. I like science. T F

45. I often lose my temper. T F

46. I am bothered by people outside, on streetcars, in stores, etc., watching me. T F

47. Society owes a lot more to the businessman and the manufacturer than it does to the artist and the professor. T F

48. I like to read about science. T F

49. I often wish people would be more definite about things. T F

50. Every now and then I get into a bad mood, and no one can do anything to please me. T F

51. I hardly ever feel pain in the back of the neck. T F

52. It is hard for me to sympathize with someone who is always doubting and unsure about things. T F

53. I seldom worry about my health. T F

54. I dream frequently about things that are best kept to myself. T F

55. It bothers me when something unexpected interrupts my daily routine. T F

56. I would have been more successful if people had given me a fair chance. T F

57. Strong people do not show their emotions and feelings. T F

58. It seems that people used to have more fun than they do now. T F

APPENDIX F

PERCEIVED HEALTH MEASURE

If '1' represents the very poorest and '7' the very best, how would you rate your physical health at the present time?

1 2 3 4 5 6 7

APPENDIX G

GERIATRIC DEPRESSION SCALE

Choose the best answer for how you felt over the last week.

1. Are you basically satisfied with your life?	yes	no
2. Have you dropped many of your activities and interests?	yes	no
3. Do you feel that your life is empty?	yes	no
4. Do you ofen get bored?	yes	no
5. Are you hopeful about the future?	yes	no
6. Are you bothered by thoughts you can't get out of your head?	yes	no
7. Are you in good spirits most of the time?	yes	no
8. Are you afraid that something bad is going to happen to you?	yes	no
9. Do you feel happy most of the time?	yes	no
10. Do you often feel helpless?	yes	no
11. Do you often get restless and fidgety?	yes	no
12. Do you prefer to stay at home, rather than going out and doing new things?	yes	no
13. Do you frequently worry about the future?	yes	no
14. Do you feel you have more problems with memory than most?	yes	no
15. Do you feel it is wonderful to be alive now?	yes	no
16. Do you often feel downhearted and blue?	yes	no
17. Do you feel pretty worthless the way you are now?	yes	no
18. Do you worry a lot about the past?	yes	no
19. Do you find life very exciting?	yes	no
20. Is it hard for you to get started on new projects?	yes	no

21. Do you feel full of energy? yes no

22. Do you feel that your situation is hopeless? yes no

23. Do you think that most people are better off than you are? yes no

24. Do you frequently get upset over little things? yes no

25. Do you frequently feel like crying? yes no

26. Do you have trouble concentrating? yes no

27. Do you enjoy getting up in the morning? yes no

28. Do you prefer to avoid social gatherings? yes no

29. Is it easy for you to make decisions? yes no

30. Is your mind as clear as it used to be? yes no

APPENDIX H

ADVERTISEMENT FOR SUBJECTS

TELL YOUR STORY!

Volunteers age 65 and up are sought for a study on older people's thoughts and feelings about aging and on how attitudes and beliefs have changed, if at all, with the years. Total time commitment is 1.5-2 hours: includes approx. 1 hr. interview and completion of questionnaire. Location of your choice. Interview must be taped. All responses confidential to research for Doctoral thesis. Contact Simon Hearn, MSc, Dept. Psychology, SFU. 251-5504 or 291-3354.

APPENDIX I

INTERVIEW CHECKLIST FOR SIGNS OF COGNITIVE IMPAIRMENT

Bizarre or deficient social behaviours	yes	no
Bizarre motor behaviours	yes	no
Dress grossly dishevelled	yes	no
Speech abnormalities	yes	no
Memory gaps and deficits	yes	no
Delusional, paranoid, nonsensical speech content	yes	no

Age

Years of education

APPENDIX J

CONSENT FORM

CONSENT FORM

Hello, my name is Simon Hearn. I'm a Ph.D. student in Psychology from Simon Fraser University. I'm conducting a research study on the ways older people think about their lives--how their lives have gone so far, how things are going now, and how they expect them to go in future.

For instance, looking back, have your thoughts and feelings and attitudes changed much over the years, or partly changed, or stayed mostly the same? Have the people and things which are most important in your life changed over time? How do you feel about your aging overall?

The interview that I would like to have with you, which is made up of questions of this kind, takes about one hour. Also, I will ask your permission to tape record the interview while we speak. The tape will be listened to later by two research assistants at the University, to see whether different listeners form the same impressions of it. From that point on, all material will remain entirely confidential. No one outside the study will learn your name.

Following the interview, I will ask you to complete 120 questionnaire items which ask about your feelings and outlooks in a number of areas. These can be answered quite quickly, and should take between half an hour and an hour to complete. No one except me will see your responses. I will also ask your age and the number of years of education you have completed. This is all I will ever ask of you, so the total time I am asking for is between one and a half and two hours.

If at any point during the process you would like to have a break, just let me know and that will be fine. Also, you are quite free to withdraw at any time. If you would like, I can send you a summary of the results of the study when it is over.

If you have any questions, feel free to ask me. If you are willing to go ahead, please sign your name below.

I understand what is asked of me and I consent to participate. Signed,

_____

_____ Date

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