

Happiness Is Everything, or Is It? Explorations on the Meaning of Psychological Well-Being

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Reigning measures of psychological well-being have little theoretical grounding, despite an extensive literature on the contours of positive functioning. Aspects of well-being derived from this literature (i.e., self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth) were operationalized. Three hundred and twenty-one men and women, divided among young, middle-aged, and older adults, rated themselves on these measures along with six instruments prominent in earlier studies (i.e., affect balance, life satisfaction, self-esteem, morale, locus of control, depression). Results revealed that positive relations with others, autonomy, purpose in life, and personal growth were not strongly tied to prior assessment indexes, thereby supporting the claim that key aspects of positive functioning have not been represented in the empirical arena. Furthermore, age profiles revealed a more differentiated pattern of well-being than is evident in prior research.

The question of who in American society is happy has been extensively probed by survey researchers (e.g., Campbell, 1981; Herzog, Rodgers, & Woodworth, 1982; Veroff, Douvan, & Kulka, 1981). Recently, social psychologists have become interested in factors that influence people's judgments about well-being, such as their mood states at the time of assessment (Schwarz & Clore, 1983) or whether their judgments are based on the frequency or intensity of positive feeling states (Diener, Larson, Levine, & Emmons, 1985). On a more general level, increased interest in the study of psychological well-being follows from the recognition that the field of psychology, since its inception, has devoted much more attention to human unhappiness and suffering than to the causes and consequences of positive functioning (Diener, 1984; Jahoda, 1958).

The premise of this study is that there has been particular neglect at the most fundamental level in this realm, namely, the task of defining the essential features of psychological well-being. It is argued that much of the prior literature is founded on conceptions of well-being that have little theoretical rationale and, as a consequence, neglect important aspects of positive functioning. An alternative conception, based on the integration of several theoretical domains, is presented. Once operationalized, this formulation is then contrasted with indicators of well-being from the past literature to assess whether theory-guided conceptions define new dimensions of positive functioning not evident in prior empirical research.

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Current Formulations of Well-Being: A Critique

Although current indexes of subjective well-being have been extensively evaluated (e.g., Diener, 1984; Larson, Diener, & Emmons, 1985), such assessments have focused largely on the reliability and validity of existing measures. Thus, it is known that single-item indicators of well-being are less reliable than multi-item scales, that social desirability is not a major confound in this literature, and that ratings of life satisfaction tend to be more stable than affective aspects of well-being. When it comes to articulating the basic structure of psychological well-being, discussions nearly always center around the distinction between positive and negative affect and life satisfaction (Andrews & Withey, 1976; Bradburn, 1969; Bryant & Veroff, 1982; Diener & Emmons, 1984; Liang, 1984, 1985; Stock, Okun, & Benin, 1986). Because these dimensions are central to this literature, it is relevant to examine their origins.

Bradburn's (1969) classic work on the structure of psychological well-being provided the initial distinction between positive and negative affect. The aim of this research was to learn how certain macrolevel social changes (e.g., changes in education levels, employment patterns, urbanization, or political tensions) affected the life situations of individual citizens and, in turn, their sense of psychological well-being. A central question was what should be used as a dependent variable in studying these "difficulties in living" (p. 5). In reflecting on this issue, Bradburn stated that

There are no clear-cut criteria for making this choice. Indeed, much of the art of scientific investigation lies in the choice of the variables to study; and the difference between success and failure appears to lie more in the realm of intuition and luck than the scientific enterprise. (p. 6)

Following from common sense as well as historical reasons, Bradburn (1969) and colleagues decided to focus on happiness as the outcome variable. Reference was made to Aristotle's *Ni-*

comachean Ethics (1947), which states that the highest of all goods achievable by human action is happiness (the latter term serving as the translation for the Greek word *eudaimonia*). The subsequent decision to operationalize happiness as the balance between positive and negative affect was essentially an empirical one. That is, pilot investigations had revealed that answers to questions about positive functioning (e.g., "During the past few weeks did you ever feel pleased about having accomplished something?") did not predict answers to questions about negative functioning (e.g., "During the past few weeks did you ever feel upset because someone criticized you?") The two dimensions were also found to have different correlates—hence, the argument that positive and negative affect are distinct dimensions of well-being and that the balance between them serves as an index of happiness.

Two observations are pertinent to the assessment of this ground-breaking study. First, the central objective of the research was *not* to define the basic structure of psychological well-being. Rather, the focus was on social change, of which little occurred over the 1-year period during which the study was conducted. The demonstration that positive and negative affect were independent appeared to be a serendipitous finding of a study conceived for other purposes.

Second, it is questionable whether the Greek word *eudaimonia* is properly translated as *happiness*. Waterman (1984) has argued that such a translation suggests an equivalence between eudaimonism and hedonism, which would have been contrary to the important distinction made by the Greeks between the gratification of right desires and wrong desires. From this alternative perspective, *eudaimonia* is more precisely defined as "the feelings accompanying behavior in the direction of, and consistent with, one's true potential" (Waterman, 1984, p. 16). *Daimon*, then, is an ideal in the sense of an excellence, a perfection toward which one strives, and it gives meaning and direction to one's life. Had Aristotle's view of *eudaimonia* as the highest of all good been translated as realization of one's true potential rather than as happiness, the past 20 years of research on psychological well-being might well have taken different directions.

Happiness, however, has not been the only indicator of positive psychological functioning in previous empirical studies. Much literature has also been generated on well-being defined as life satisfaction. Prominent measures in this domain (e.g., Life Satisfaction Index, or LSI; Neugarten, Havighurst, & Tobin, 1961) were also developed for purposes other than defining the basic structure of psychological well-being. The LSI, for example, was constructed to differentiate persons who were aging successfully from those who were not. The general neglect of theory in formulating life satisfaction and related constructs, such as morale, has been acknowledged as a significant limitation of these gerontological research instruments (Sauer & Warland, 1982).

The absence of theory notwithstanding, efforts to define the structure of well-being on the basis of these measures persists. Recent investigations have tested various models of subjective well-being (e.g., Liang, 1984, 1985; Liang & Bollen, 1983; Stock et al., 1986), using multivariate analyses of the LSI, the Affect Balance Scale, and the Philadelphia Geriatric Center Morale

Scale (Lawton, 1975). These structural analyses continue to emphasize a basic distinction between positive and negative affect as well as various other factors (e.g., congruence, long-term positive effect).

The point of this brief review is to bring attention to the fact that the literature on psychological well-being was not, in its inception, strongly theory guided. Instruments were developed for other purposes, and these then became the standard bearers for defining positive functioning. Such conceptions continue to serve as outcome variables in a vast array of studies aimed at identifying factors that influence well-being and predicting who has it. Even ongoing efforts to define the basic structure of well-being follow from multivariate analyses of these early instruments.

As noted earlier, the central argument of this research is that these prior formulations neglect important aspects of positive psychological functioning. To understand what is missing, it is necessary to consider another literature that, despite its central concern with defining positive functioning, has rarely been a part of the empirical agenda on psychological well-being.

Contours of Well-Being: Alternative Perspectives

The extensive literature aimed at defining positive psychological functioning includes such perspectives as Maslow's (1968) conception of self-actualization, Rogers's (1961) view of the fully functioning person, Jung's (1933; Von Franz, 1964) formulation of individuation, and Allport's (1961) conception of maturity. A further domain of theory for defining psychological well-being follows from life span developmental perspectives, which emphasize the differing challenges confronted at various phases of the life cycle. Included here are Erikson's (1959) psychosocial stage model, Buhler's basic life tendencies that work toward the fulfillment of life (Buhler, 1935; Buhler & Massarik, 1968), and Neugarten's (1968, 1973) descriptions of personality change in adulthood and old age. Jahoda's (1958) positive criteria of mental health, generated to replace definitions of well-being as the absence of illness, also offer extensive descriptions of what it means to be in good psychological health.

These perspectives have had meager empirical impact (see Ryff, 1982, 1985). One obvious reason is that few of them have been accompanied by credible assessment procedures. Researchers attracted to such formulations have been immobilized by the absence of valid measures. A second major stumbling block is that the criteria of well-being generated are diverse and extensive. It is difficult to determine which among the many descriptions should serve as the essential features of positive psychological functioning. A third objection has been the claim that this literature is hopelessly value laden in its pronouncements about how people should function.

Ryff (1989a) has argued that the preceding perspectives, despite their loose conceptualizations, can be integrated into a more parsimonious summary. That is, when one reviews the characteristics of well-being described in these various formulations, it becomes apparent that many theorists have written about similar features of positive psychological functioning. These points of convergence in the prior theories constitute the core dimensions of the alternative formulation of psychological

well-being pursued in this research. They are briefly summarized here (detailed descriptions of the characteristics and how they were derived are available in Ryff, 1989a). A major aim of the present study was to operationalize these dimensions.

Self-acceptance. The most recurrent criterion of well-being evident in the previous perspectives is the individual's sense of self-acceptance. This is defined as a central feature of mental health as well as a characteristic of self-actualization, optimal functioning, and maturity. Life span theories also emphasize acceptance of self and of one's past life. Thus, holding positive attitudes toward oneself emerges as a central characteristic of positive psychological functioning.

Positive relations with others. Many of the preceding theories emphasize the importance of warm, trusting interpersonal relations. The ability to love is viewed as a central component of mental health. Self-actualizers are described as having strong feelings of empathy and affection for all human beings and as being capable of greater love, deeper friendship, and more complete identification with others. Warm relating to others is posed as a criterion of maturity. Adult developmental stage theories also emphasize the achievement of close unions with others (intimacy) and the guidance and direction of others (generativity). Thus, the importance of positive relations with others is repeatedly stressed in these conceptions of psychological well-being.

Autonomy. There is considerable emphasis in the prior literature on such qualities as self-determination, independence, and the regulation of behavior from within. Self-actualizers, for example, are described as showing autonomous functioning and resistance to enculturation. The fully functioning person is also described as having an internal locus of evaluation, whereby one does not look to others for approval, but evaluates oneself by personal standards. Individuation is seen to involve a deliverance from convention, in which the person no longer clings to the collective fears, beliefs, and laws of the masses. The process of turning inward in the later years is also seen by life span developmentalists to give the person a sense of freedom from the norms governing everyday life.

Environmental mastery. The individual's ability to choose or create environments suitable to his or her psychic conditions is defined as a characteristic of mental health. Maturity is seen to require participation in a significant sphere of activity outside of self. Life span development is also described as requiring the ability to manipulate and control complex environments. These theories emphasize one's ability to advance in the world and change it creatively through physical or mental activities. Successful aging also emphasizes the extent to which the individual takes advantage of environmental opportunities. These combined perspectives suggest that active participation in and mastery of the environment are important ingredients of an integrated framework of positive psychological functioning.

Purpose in life. Mental health is defined to include beliefs that give one the feeling there is purpose in and meaning to life. The definition of maturity also emphasizes a clear comprehension of life's purpose, a sense of directedness, and intentionality. The life span developmental theories refer to a variety of changing purposes or goals in life, such as being productive and creative or achieving emotional integration in later life. Thus, one

who functions positively has goals, intentions, and a sense of direction, all of which contribute to the feeling that life is meaningful.

Personal growth. Optimal psychological functioning requires not only that one achieve the prior characteristics, but also that one continue to develop one's potential, to grow and expand as a person. The need to actualize oneself and realize one's potentialities is central to the clinical perspectives on personal growth. Openness to experience, for example, is a key characteristic of the fully functioning person. Such an individual is continually developing and becoming, rather than achieving a fixed state wherein all problems are solved. Life span theories also give explicit emphasis to continued growth and the confronting of new challenges or tasks at different periods of life. Thus, continued personal growth and self-realization is a prominent theme in the aforementioned theories. It may also be the dimension of well-being that comes closest to Aristotle's notion of eudaimonia as described earlier.

In sum, the integration of mental health, clinical, and life span developmental theories points to multiple converging aspects of positive psychological functioning. Conceptually, certain of these criteria appear to be separate in meaning from the dimensions that have long guided studies of psychological well-being (e.g., positive and negative affect, life satisfaction). That is, little in the current empirical literature emphasizes such qualities as positive relations with others, autonomy, purpose in life, or personal growth as key components of well-being. The empirical challenge, therefore, is to operationalize these theory-guided dimensions so that they may be examined vis-à-vis the reigning indexes of positive functioning. Such comparisons will clarify whether the alternative approach affords criteria of psychological well-being that are theoretically and empirically distinct from existing formulations.

Method

Sample

Respondents consisted of 321 men and women divided among young, middle-aged, and older adults. Multiple age groups were selected so that it would be possible to examine the life course patterning of the previously described dimensions of well-being. The young adults ($n = 133$, mean age = 19.53, $SD = 1.57$) were contacted through an educational institution, and the middle-aged adults ($n = 108$, mean age = 49.85, $SD = 9.35$) and the older adults ($n = 80$, mean age = 74.96, $SD = 7.11$) were contacted through community and civic organizations.

The educational levels of the three groups were quite high. Nearly 60% of the middle-aged respondents had completed 4 years of college, and almost a third had completed graduate school. For the older adult group, approximately 47% had completed 4 years of college, and an additional 30% had done some graduate work. With regard to health ratings, the older respondents had significantly lower self-ratings than the middle-aged or young adult groups, $F(2, 319) = 3.59, p < .001$, but analysis of the response frequencies by health category revealed that 82.6% of the older respondents rated their health as excellent or good. Only 2.5% rated their health as poor.

With regard to financial status, the vast majority of respondents rated their situation as excellent or good. There were, however, sex differences, with women overall rating their finances less positively than men, $F(1, 319) = 6.48, p < .05$. Nearly all of the young adults were single, most of

the middle-aged respondents were married, and about half of the older respondents were married. As age trends would predict, nearly one third of the older individuals were widowed. In terms of religious background, most of the sample were Catholic or Protestant.

Overall, then, this was a sample of relatively healthy, well-educated, financially comfortable respondents. Although these characteristics limit the overall generalizability of the findings, they do provide a useful context for the assessment of optimal psychological functioning.

Measures

A primary objective of this research was to operationalize the six dimensions of psychological well-being generated from the integration of the previously discussed theories. To maximize the fit between the assessment instruments and the conceptual literature, new measures were constructed. Although existing inventories include scales of similar names (e.g., the Self-Acceptance scale of the California Psychological Inventory), these instruments were developed for other purposes, and their items do not reflect the conceptual definitions guiding the present study. The scale construction and assessment procedures for the new measures follow. As these instruments were administered jointly with other well-used indexes of psychological well-being, a further section details the measures used in the prior literature.

Construction and assessment of new measures of well-being. The operationalization of the proposed dimensions of psychological well-being is based on the construct-oriented approach to personality assessment (Wiggins, 1973). Of key importance in the empirical translation is the presence of psychological theory that specifies the constructs of interest. Each of the six dimensions described earlier are theoretical constructs that point to different aspects of positive functioning. The objective is to develop structured, self-report instruments that serve as indicators of these constructs. The procedures also parallel those followed in operationalizing a subset of the previous theories, namely, life span developmental conceptions (see Ryff & Heincke, 1983).

The scale construction process was begun by writing definitions for the six dimensions of well-being. These were derived from their theoretical formulations (see Ryff, 1989a). The scale definitions, presented in terms of high versus low scorers, are presented in Table 1. On the basis of the bipolar scale definitions, approximately 80 items were generated for each scale, with half written for each pole of the definition. The items were generated by three item writers whose instructions were to write self-descriptive items that fit with the theoretical definitions and that could be applicable to both sexes as well as to adults of any age.

The items generated by these procedures were subjected to preliminary evaluations according to the following criteria: ambiguity or redundancy of the items, lack of fit of the items with their scale definitions, lack of distinctness of items with items from other scales, inability of items to produce variable responses, and whether all aspects of the scale definitions were covered by the items. On the basis of these procedures, over half of the items from each scale were deleted. The remaining item pools, consisting of 32 items per scale (16 positive and 16 negative) were administered to the research sample of 321 young, middle-aged, and older adults. Respondents rated themselves on each item according to a 6-point scale ranging from *strongly agree* to *strongly disagree*.

Using these data, item-to-scale correlations were computed for all of the items with all of the scales. Items that correlated more highly with a scale other than their own or that showed low correlations with their total scale were deleted. The internal consistency (α) coefficients for the scales were as follows: self-acceptance, .93; positive relations with others, .91; autonomy, .86; environmental mastery, .90; purpose in life, .90; and personal growth, .87. Each scale at this stage consisted of 20 items, divided approximately equally between positive and negative items.

Table 1
Definitions of Theory-Guided Dimensions of Well-Being

Self-acceptance

High scorer: Possesses a positive attitude toward the self; acknowledges and accepts multiple aspects of self including good and bad qualities; feels positive about past life.

Low scorer: Feels dissatisfied with self; is disappointed with what has occurred in past life; is troubled about certain personal qualities; wishes to be different than what he or she is.

Positive relations with others

High scorer: Has warm, satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy, affection, and intimacy; understands give and take of human relationships.

Low scorer: Has few close, trusting relationships with others; finds it difficult to be warm, open, and concerned about others; is isolated and frustrated in interpersonal relationships; not willing to make compromises to sustain important ties with others.

Autonomy

High scorer: Is self-determining and independent; able to resist social pressures to think and act in certain ways; regulates behavior from within; evaluates self by personal standards.

Low scorer: Is concerned about the expectations and evaluations of others; relies on judgments of others to make important decisions; conforms to social pressures to think and act in certain ways.

Environmental mastery

High scorer: Has a sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities; able to choose or create contexts suitable to personal needs and values.

Low scorer: Has difficulty managing everyday affairs; feels unable to change or improve surrounding context; is unaware of surrounding opportunities; lacks sense of control over external world.

Purpose in life

High scorer: Has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose; has aims and objectives for living.

Low scorer: Lacks a sense of meaning in life; has few goals or aims, lacks sense of direction; does not see purpose of past life; has no outlook or beliefs that give life meaning.

Personal growth

High scorer: Has a feeling of continued development; sees self as growing and expanding; is open to new experiences; has sense of realizing his or her potential; sees improvement in self and behavior over time; is changing in ways that reflect more self-knowledge and effectiveness.

Low scorer: Has a sense of personal stagnation; lacks sense of improvement or expansion over time; feels bored and uninterested with life; feels unable to develop new attitudes or behaviors.

The test-retest reliability coefficients for the 20-item scales over a 6-week period on a subsample of respondents ($n = 117$) were as follows: self-acceptance, .85; positive relations with others, .83; autonomy, .88; environmental mastery, .81; purpose in life, .82; and personal growth, .81.

Evidence for the validity of the scales is examined in the Results section. Before presenting those findings, a brief summary of the measures of well-being from the prior literature included in the assessment battery is presented.

Prior measures of well-being. Six measures of psychological functioning were administered to the respondents in order to provide comparative information regarding the newly constructed measures. These in-

Table 2
Intercorrelations of Well-Being Measures

	1	2	3	4	5	6	LSI	ABS	SE	LEVP	LEVI	LEV	ZDS	MS
1. SA	—						.73	.55	.62	-.45	.49	-.43	-.59	.59
2. PR	.52	—					.43	.30	.36	-.36	.37	-.33	-.33	.30
3. AU	.52	.32	—				.26	.36	.36	-.45	.38	-.38	-.38	.32
4. EM	.76	.45	.53	—			.61	.62	.55	-.47	.52	-.46	-.60	.62
5. PL	.72	.55	.46	.66	—		.59	.42	.49	-.37	.53	-.46	-.60	.55
6. PG	.48	.57	.39	.46	.72	—	.38	.25	.29	-.30	.38	-.39	-.48	.44

Note. All correlations are significant at $p < .001$. New measures: SA = self-acceptance, PR = positive relations with others, AU = autonomy, EM = environmental mastery, PL = purpose in life, PG = personal growth. Former measures: LSI = Life Satisfaction Index (Neugarten, Havighurst, & Tobin, 1961); ABS = Affect Balance Scale (Bradburn, 1969); SE = Self-Esteem Scale (Rosenberg, 1965); LEVP = Powerful Others, LEVI = Internal, LEVC = Chance (Levenson, 1974); ZDS = Zung Depression Scale (Zung, 1965); MS = Philadelphia Geriatric Morale Scale (Lawton, 1975).

struments were selected because of their prominence in previous studies on psychological well-being and adjustment in middle and later life. Although the relation between the new measures and the broad domain of personality is also of interest and is an important avenue for future investigation, the present objective was to test the assertion that existing indexes of psychological well-being do not address aspects of positive functioning emphasized in the theoretical literature. As such, it was imperative to use measures from the well-being domain. These instruments are detailed in the following paragraphs.

1. *Affect Balance Scale.* As noted earlier, Bradburn (1969) developed the Affect Balance Scale to measure psychological well-being, which was defined as avowed happiness. The measure consists of a 10-item scale, with 5 items that measure positive affect and 5 that measure negative affect. Scoring is conducted by giving respondents a value of 1 for each yes response to the items making up the scale. The responses are summed separately for the positive affect and negative affect items. The difference between the scores is then computed, and a constant is added to remove negative summary scores.

Bradburn (1969) reported test-retest reliability on a sample of 200 over a 3-day period for positive affect, negative affect, and affect balance to be respectively, .83, .81, and .76. With regard to validity, Bradburn showed that positive affect correlated with single-item indicators of happiness from .34 to .38 and with corresponding values for negative affect at -.33 and -.38. Bradburn had hypothesized that positive and negative affect were distinct dimensions; this was supported by small associations between the scales (.04-.15). Factor analyses have also indicated distinct orthogonal dimensions.

2. *Life satisfaction.* The Life Satisfaction Index (LSI) was developed as part of the Kansas City Study of Adult Life (Neugarten et al., 1961) to measure the individual's evaluation of his or her own psychological well-being. Life satisfaction was defined as including five components: zest (versus apathy), resolution and fortitude, congruence between desired and achieved goals, positive self-concept, and mood tone.

The Life Satisfaction Index A (LSI-A) consists of 20 statements with which the respondent agrees or disagrees. Neugarten et al. (1961) reported the mean score on the LSI-A to be 12.4 ($SD = 4.4$). Scores on the LSI-A correlated .39 with clinical ratings. Reliability of the LSI-Z, which consists of 13 of the LSI-A items, was .79. Although life satisfaction has been described as the most widely studied variable in aging research (Maddox & Wiley, 1976), evidence for its reliability and validity has not been extensive (Sauer & Warland, 1982).

3. *Self-esteem.* Rosenberg (1965) defined self-esteem as self-acceptance, a basic feeling of self-worth. His Self-Esteem Scale was originally developed for high school students, but it has been used extensively with older groups of adults (Breytspraak & George, 1982). The instrument consists of 10 items reported along a 4-point continuum from *strongly*

agree to strongly disagree. Rosenberg reported a reproducibility coefficient of .92 and a scaleability coefficient of .72. With regard to validity, he reported significant correlations between self-esteem and clinical ratings of depression.

The Self-Esteem Scale was included in this study because of its apparent resemblance to the dimension of self-acceptance in the proposed formulation of psychological well-being.

4. *Morale.* The Revised Philadelphia Geriatric Center Morale Scale was developed by Lawton (1975). High morale is defined as a basic sense of satisfaction with oneself, a feeling that there is a place in the environment for oneself, and an acceptance of what cannot be changed. It was designed to measure morale among the very old and was based primarily on an institutional population.

The original instrument contained 22 items, but it was reduced to 17 items in the revised version. Lawton (1972) reported split-half reliability estimates for the 22-item scale to be .79 on a sample of 300. The coefficient of internal consistency (Kuder-Richardson 20) was .81. Correlations of the original scale with judges' ratings ranged from .43 to .57.

5. *Locus of control.* The newly proposed dimension of autonomy appeared to be similar to notions of control prominent in prior research. Thus, Levenson's (1974) three locus of control subscales were used to assess these parallels. The subscales were generated in response to the claim that Rotter's (1966) Internal-External Scale was not unidimensional, but could be separated into various factors: felt mastery over one's personal life, expectancies of control over political institutions, and one's beliefs about the role of internal and external forces in society. Levenson's subscales were designed to measure perceived mastery over one's life and belief in chance as separate from expectancy for control by powerful others. Two studies were reported that validated the separation of locus of control into the internal, powerful others, and chance dimensions (Levenson, 1974).

Each subscale consists of eight items in a Likert format, with a 6-point scale ranging from *strongly agree to strongly disagree*. The subscales can be scored independently, with a range of possible scores from 0 to 48. Estimates of internal consistency for the subscales compare favorably with those found for the Rotter (1966) scale. Kuder-Richardson reliabilities were .64 for the Internal subscale, .77 for the Powerful Others subscale, and .78 for the Chance subscale. Levenson's multidimensional scale has also shown adequate test-retest reliability for a 1-week period: Internal subscale, .64; Powerful Others subscale, .74; and Chance subscale, .78. Factor analysis of the responses of 329 college men supported the conceptualization of three independent dimensions of locus of control. The instrument has been used in studies with aged persons (Lachman, 1986).

6. *Depression.* Much research on psychological well-being has been conducted with measures of maladjustment (Lawton, 1984). In this

Table 3
Factor Analysis of Well-Being Indexes

Variable	Factor 1	Factor 2	Factor 3
Life satisfaction	.79		
Affect-balance	.78		
Morale	.77		
Self-acceptance	.70	.41	
Environmental mastery	.69		
Self-esteem	.69		
Depression	-.66		
Internal control	.45		
Personal growth		.86	
Positive relations with others		.73	
Purpose in life	.49	.71	
Powerful others			-.85
Chance control			-.76
Autonomy			.62

Note. Varimax rotation of three principal components. All loadings above .40 are shown.

framework, well-being is conceived of as the absence of illness. Thus, an instrument was included to parallel this approach to well-being. Zung's (1965) Depression Scale consists of a 20-item self-rating scale designed to assess depression as a psychiatric disorder. The scale reflects symptoms of the depressive illness such as crying spells, sleep disorders, irritability, eating problems, and so on.

In devising the Self-Rating Depression Scale (SDS), Zung used the most commonly found clinical diagnostic criteria. The items were based on these criteria; 10 were worded symptomatically positive and 10 were worded symptomatically negative. Respondents rate each item on a 4-point scale from *none or a little of the time* to *most or all of the time*. The final index is derived by summing values for the 20 items and dividing by a maximum possible score of 80. (In the present study, this final division was omitted so that the scores would be expressed as whole numbers). Mean indexes achieved on the scale for patients diagnosed as having depressive disorders before and after treatment were .74 and .39, respectively. The mean index for patients who were initially diagnosed as having a depressive disorder, but who were discharged as having another disorder, was .53. The mean index for the control group was .33. The presence of sleep disturbance appears to be the most important symptom of the depressive disorder.

Procedures

Items for the new scales of psychological well-being were randomly mixed to create a single instrument. Respondents received this measure along with the six other indexes of well-being. The instruments were self-administered, with the testing time ranging from 45 min to 75 min. The young adults completed the questionnaire in small group sessions at the university. The middle-aged and the older respondents completed their surveys at work or at home and then returned them by mail to the experimenter. Only those individuals who had expressed a willingness to complete the survey were invited to participate. Therefore, the response rate among the two older groups was nearly 100%. Financial contributions were made to the community organizations participating in the study on the basis of the number of their members who returned the questionnaire.

Results

The findings are presented in two primary sections. First, the correlational results are examined to assess the empirical dis-

tinctness of the new dimensions, among themselves and in comparison to the prior indexes of well-being. Both bivariate and multivariate perspectives on these relations are examined. The second major category of results pertains to the analysis of the life course patterning of the various measures of well-being. Thus, age differences in the self-ratings are examined. Also of interest in these analyses are differences in how men and women rate themselves on the different dimensions of psychological well-being. The contrast between the new and former indexes of positive functioning are emphasized in reviewing these mean-level analyses.

Correlational Analyses

Intercorrelations of all of the measures of well-being for the total sample are presented in Table 2. These outcomes provide preliminary evidence for the validity of the newly constructed scales of well-being. That is, correlations with prior measures of positive functioning (i.e., life satisfaction, affect balance, self-esteem, internal control, and morale) are all positive and significant, with coefficients ranging from .25 to .73. Similarly, correlations with prior measures of negative functioning (i.e., powerful others, chance control, depression) are all negative and significant, with coefficients ranging from -.30 to -.60.

The intercorrelations among the new measures themselves are also of importance. Because the dimensions are all facets of psychological well-being, positive correlations are to be expected. This is in fact the case, with the coefficients ranging from .32 to .76. However, as the coefficients become stronger, they raise the potential problem of the criteria not being empirically distinct from one another. This appears to be the case with certain dimensions, such as self-acceptance and environmental mastery, which correlate .76, and with self-acceptance and purpose in life, which correlate .72. Such outcomes suggest the scales may be measuring the same underlying construct.

There are, however, various sources of evidence that suggest distinctness among these theory-derived dimensions. First, the scale construction process required that items of each scale correlate more highly with their own scale than with another. Thus, the item pools of the separate scales are empirically differentiated. Furthermore, although they are highly intercorrelated, these scales show differential patterns with other measures (e.g., purpose in life is highly related to self-acceptance, but has generally lower correlations with life satisfaction, affect balance, and self-esteem than occur between these measures and self-acceptance). Finally, the multivariate and mean-level analyses, which are presented later, reveal that these strongly associated dimensions of positive functioning load on different factors of well-being and show differential age profiles. Thus, although the new criteria are highly related, there is evidence to support the view that they represent different facets of positive psychological functioning.

The coefficients in Table 2 are perhaps most relevant with regard to the patterns obtained between the new measures of well-being and those indexes prominent in the prior literature. These findings indicate that certain of the theory-derived criteria—in particular, self-acceptance, environmental mastery, and to some extent purpose in life—are highly correlated (posi-

Table 4
New Measures of Psychological Well-Being

Outcome measure	Women (n = 191)		Men (n = 129)	
	M	SD	M	SD
Self-acceptance				
Young adults (n = 133)	91.13	17.71	90.48	13.61
Middle-aged adults (n = 108)	93.56	19.03	99.42	18.25
Older adults (n = 80)	89.00	19.75	93.75	13.76
Positive relations with others				
Young adults	101.01	13.03	89.92	12.31
Middle-aged adults	96.07	15.40	89.99	17.04
Older adults	95.03	16.80	94.39	13.81
Autonomy				
Young adults	82.49	12.84	82.93	14.20
Middle-aged adults	87.62	14.26	87.34	13.35
Older adults	86.90	15.83	85.12	11.30
Environmental mastery				
Young adults	88.28	14.65	89.57	11.67
Middle-aged adults	93.70	15.66	96.16	15.46
Older adults	93.47	16.25	97.39	12.23
Purpose in life				
Young adults	94.92	13.38	94.80	11.93
Middle-aged adults	95.47	17.18	97.68	16.20
Older adults	88.58	16.14	92.92	14.84
Personal growth				
Young adults	102.29	9.91	97.67	9.90
Middle-aged adults	100.97	13.38	98.85	13.42
Older adults	95.51	13.94	95.79	11.20

Note. Total N = 321.

tively or negatively) with prior indexes, especially life satisfaction, affect balance, self-esteem, depression, and morale. Most of these coefficients (i.e., 87%) range between .55 and .73. However, other theory-derived criteria of positive functioning, most notably positive relations with others, autonomy, and personal growth, are not strongly associated with prior indexes. All of these coefficients are in the .25 to .45 range (positive or negative). Thus, these data suggest that, although there is considerable overlap between certain theory-guided dimensions and former indexes of well-being, other criteria following from the theoretical descriptions are not strongly linked to existing assessment instruments.

This point is further illustrated with a factor analysis of these measures, which is presented in Table 3. The three-factor solution (principal-components analysis, varimax) reveals a general Well-Being factor that consists of most of the earlier indexes of well-being (i.e., life satisfaction, affect balance, morale, self-esteem, depression, internal control) and two of the new dimensions (self-acceptance and environmental mastery). This factor accounts for approximately half (51.1%) of the variance. The second factor consists of new dimensions of well-being (personal growth, purpose in life, positive relations with others) derived from the theoretical literature and accounts for an additional 8.5% of the variance. The third factor combines the newly constructed scale of autonomy with two earlier control measures (powerful others, chance) and accounts for an additional 7.3% of the variance. (It might be noted that essentially the same factor structure is obtained when oblique methods of ro-

tation are used, which allow for intercorrelations among the factors). Thus, although the multivariate findings demonstrate a strong Well-Being factor that encompasses most of the prior measures along with two of the newly constructed indexes, the results also indicate that separate, albeit less powerful, factors of well-being emerge from combinations of the theory-guided dimensions. The substance of these factors underscores the claim that the prior indexes of well-being do not address the aspects of psychological well-being given repeated emphasis in the theoretical literature.

Age and Sex Differences on Indexes of Well-Being

Survey researchers have devoted considerable attention to questions of whether reports of well-being change across the life cycle and whether men and women differ in their self-rated psychological health (e.g., Bryant & Veroff, 1982; Herzog et al., 1982; Veroff et al., 1981). These assessments have generally been exploratory and focused on indexes of life satisfaction and positive and negative affect.

Little emphasis has been given to age and sex differences in theoretical conceptions of positive psychological functioning (see Ryff, 1985). Depictions of self-actualization (Maslow, 1968), optimal functioning (Rogers, 1961), or maturity (Allport, 1961) have not included variations by age or differences between men and women. The notable exception is life span developmental theories, which have stressed the differing challenges confronted by individuals as they grow older. These formulations suggested, for example, that certain aspects of well-being such as self-acceptance or autonomy are more easily achieved by the aged (see Buhler & Massarik, 1968; Erikson, 1959), whereas other dimensions (e.g., environmental mastery) are more prominent in the self-perceptions of middle-aged individuals (Neugarten, 1973). Little in the prior literature, however, provides a basis for predicting age variations on the dimensions of positive relations with others, purpose in life, or personal growth. Life span theories have also been generally silent with regard to predictions of sex differences, although recent critiques have emphasized that women's development is less tied to individualism and autonomy and more focused on interpersonal relations than is men's (Gilligan, 1982).

Given these loose guidelines, the empirical objective was to examine the age patterning and sex differences in the newly constructed dimensions of psychological well-being. Also of interest was how these findings would compare with prior research that had addressed age and sex differences in well-being primarily in terms of happiness and life satisfaction.

Newly constructed measures. Age and sex differences on the newly formulated indexes of well-being were examined with a 3 (young, middle-aged, and older adults) \times 2 (women or men) multivariate analysis of variance (MANOVA).¹ Wilks's lambda

¹ The argument for preceding multiple ANOVAs with a MANOVA to control for Type I error has been challenged (Huberty & Morris, 1989). It should be noted that the univariate results of this study are the same whether these analyses are preceded by a multivariate test or not. In addition, the majority of univariate outcomes are significant at the $p < .01$ or $p < .001$ level.

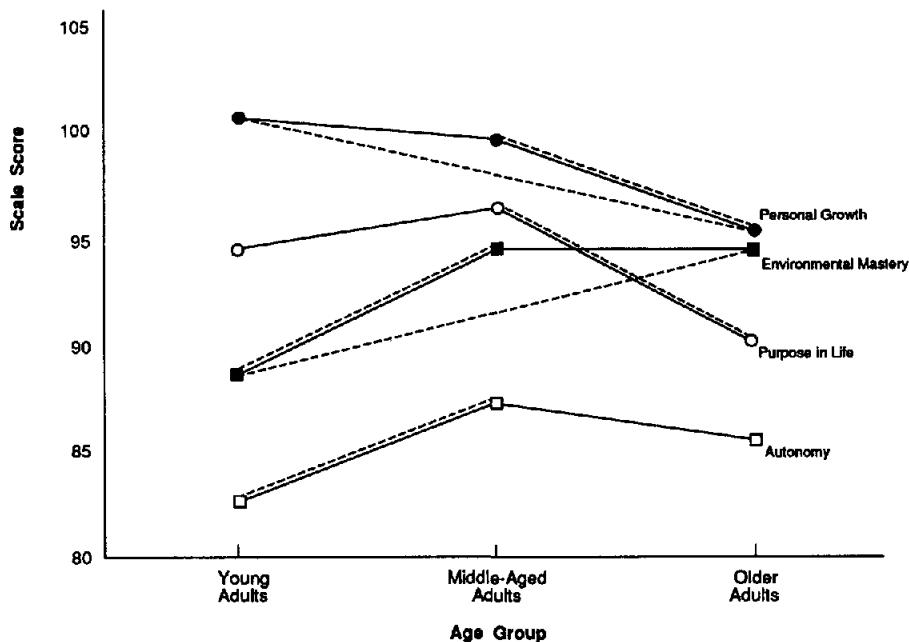


Figure 1. Age differences on newly constructed measures of well-being.
(A dashed line indicates significant difference.)

was used as the test of significance. When significant MANOVA effects were obtained, univariate analyses were then interpreted. The Tukey honestly significant difference procedure was used to interpret significant effects involving more than two groups.

Means and standard deviations for the new measures by age and sex are presented in Table 4. The analysis revealed a significant overall effect of age, $F(12, 620) = 5.98, p < .001$. This was accounted for by the dimensions of autonomy, $F(2, 315) = 4.04, p < .05$; environmental mastery, $F(2, 315) = 6.52, p < .01$; purpose in life, $F(2, 315) = 3.97, p < .05$; and personal growth, $F(2, 315) = 4.73, p < .01$. The directions of these age differences are illustrated in Figure 1.

Thus, the general age trends revealed higher scores among the middle-aged respondents, who sometimes scored significantly higher than older adults (purpose in life) and other times higher than young adults (autonomy). Both middle-aged and older adults rated themselves higher on environmental mastery than did young adults. For personal growth, young adults joined middle-aged adults in scoring higher than older adults. The life course profiles for the indexes of self-acceptance and positive relations with others indicated no age differences.

A significant overall effect of sex was also obtained, $F(6, 310) = 8.65, p < .001$. This was accounted for by the measure of positive relations with others, $F(1, 315) = 17.64, p < .001$, on which women scored higher than men. Outcomes for personal growth approached significance, $F(1, 315) = 3.61, p < .058$, with women again scoring higher than men. No other significant sex differences were obtained for any other measures of well-being. There were also no significant Age \times Sex interactions in these analyses.

Prior indexes of well-being. Age and sex differences on the

six prior measures of well-being were analyzed by a series of univariate analyses of variance. (The rationale for univariate analyses was that these scales are derived from diverse conceptual origins. However, the results are essentially the same when preceded by a MANOVA.) Means and standard deviations for these analyses are presented in Table 5.

Significant age differences were obtained for the measures of affect balance, $F(2, 314) = 18.90, p < .001$; morale, $F(2, 313) = 4.58, p < .01$; chance control, $F(2, 312) = 9.66, p < .001$; and depression, $F(2, 312) = 17.50, p < .001$. These results are summarized in Figure 2, which indicates that young adults rated themselves lower than the other two age groups on affect balance and chance control. Young adults also scored significantly lower than middle-aged respondents on morale. In contrast, older adults scored significantly higher than the two younger groups on the measure of depression. Significant age differences were not obtained for life satisfaction, self-esteem, and two control subscales (Internal and Powerful Others).

Main effects of sex were obtained for the measures of internal control, $F(1, 314) = 5.24, p < .05$; morale, $F(1, 313) = 8.40, p < .01$; and depression, $F(1, 312) = 5.05, p < .05$. Men had significantly more positive self-assessments on all of these measures than did women (i.e., higher scores on internal control and morale and lower scores on depression). The measure of life satisfaction approached significance, $F(1, 314) = 3.81, p < .052$, with men again scoring higher than women. Sex differences were not obtained for the measures of affect balance, self-esteem, and two aspects of control (chance, powerful others).

Finally, one Age \times Sex interaction was obtained for the measure of life satisfaction, $F(2, 314) = 3.95, p < .05$. The interaction reveals decreasing scores for women across the three age

Table 5
Prior Measures of Psychological Well-Being

Outcome measure	Women (n = 192)		Men (n = 129)	
	M	SD	M	SD
Life satisfaction				
Young adults (n = 133)	14.71	3.39	14.09	2.89
Middle-aged adults (n = 108)	14.44	3.75	16.12	3.44
Older adults (n = 80)	13.80	4.23	15.55	3.32
Affect balance				
Young adults	6.82	1.81	7.04	1.62
Middle-aged adults	7.69	1.85	8.04	1.87
Older adults	8.21	1.89	8.72	1.47
Self-esteem				
Young adults	18.76	1.94	18.93	1.24
Middle-aged adults	19.11	1.41	19.53	2.76
Older adults	18.63	2.11	19.24	1.50
Powerful others				
Young adults	21.98	5.61	23.04	5.16
Middle-aged adults	21.29	6.51	21.30	5.81
Older adults	20.39	7.70	21.94	6.82
Internal control				
Young adults	35.84	4.42	36.62	4.92
Middle-aged adults	36.32	5.27	37.72	5.21
Older adults	36.13	5.95	38.16	4.24
Chance control				
Young adults	22.77	6.01	24.66	5.46
Middle-aged adults	20.84	5.76	19.46	5.10
Older adults	21.07	6.73	20.97	6.30
Depression				
Young adults	34.82	7.30	33.00	5.67
Middle-aged adults	32.17	6.00	30.75	5.90
Older adults	38.21	7.50	36.29	6.77

Note. Total N = 321.

periods, whereas men's scores increase from young adulthood to middle age and then drop slightly in the later years.

Supplemental Regression Analyses

Preliminary analyses were conducted to explore possible predictors of psychological well-being. The predictor variables in these stepwise regression analyses included broad demographic characteristics: age, sex (female = 1, male = 0), educational level, marital status (married = 1, unmarried = 0), and self-rated health and finances (excellent = 4, good = 3, fair = 2, poor = 1). The correlations among the predictor variables were low; all coefficients were below .30, with the exception of the association between age and marital status ($r = .46$) and between education and marital status ($r = .31$). The results of these analyses, presented separately for each of the new and the former scales of well-being, are found in Table 6.

In general, the demographic factors account for low levels of variance (range = 3%–24%) in the well-being indexes. Among the prominent predictor variables for the new measures were self-rated finances and health. Being married was a predictor of self-acceptance and purpose in life, and being female predicted positive relations with others and personal growth. Age and educational level were of weak predictive significance for the new indexes.

For the prior indexes of well-being, self-rated finances again appeared to be a leading predictor variable. Age and marital status were also more prominent predictors of these outcomes. Educational level was again of minimal predictive power. Sex did not enter any of the equations as a significant predictor variable, which suggests that the previously obtained mean-level differences between men and women on internal control, morale, and depression were accounted for by differences in their life situations (e.g., finances, marital status, health, age).

Discussion

The aim of the present research was to stimulate interest in the basic question of what constitutes positive psychological functioning. It has been argued that early conceptions of well-being suffered from limited theoretical grounding, which led to the neglect of important facets of psychological health. At the same time, the extant theoretical literature, although articulating richer conceptions of well-being, was criticized for its unrealized empirical translation.

In an effort to introduce certain of these theoretical ideas to the empirical literature, six theory-guided dimensions of well-being were operationalized. These measures revealed acceptable preliminary psychometric properties, although further validation and assessment is needed. Certain of these instruments showed convergence with prior indexes of well-being. For example, self-acceptance and environmental mastery were strongly associated with measures of life satisfaction, affect balance, self-esteem, and morale, thereby indicating clear linkages between theory-guided components of well-being and those evident in current empirical studies. However, other dimensions—most notably, positive relations with others, autonomy, purpose in life, and personal growth—were not as closely tied to current assessment indexes, as evident in both bivariate and multivariate analyses. These findings support the claim that key aspects of positive psychological functioning emphasized in theory have not been represented in the empirical arena.

What are the implications of such findings for past and future research on psychological well-being? Primarily, they suggest that the previous literature has been guided by somewhat narrow conceptions of positive functioning. Central emphasis has been given to short-term affective well-being (i.e., happiness), at the expense of more enduring life challenges such as having a sense of purpose and direction, achieving satisfying relationships with others, and gaining a sense of self-realization. These contrasts harken back to the deliberations of the Greeks regarding the difference between feeling good at the moment and the more demanding task of realizing one's true potential (Waterman, 1984). Similarly, life satisfaction, despite its more enduring, long-term quality, has failed to monitor such features of well-being as autonomy, personal growth, and positive relations with others.

These heretofore neglected aspects of well-being are increasingly attracting the interest of social psychologists. For example, personal strivings, which refer to goals that individuals try to achieve in everyday behavior, have emerged as a new topic of empirical inquiry (Emmons, 1986). Similarly, meaning and purpose in life have become an empirical focus in gerontologi-

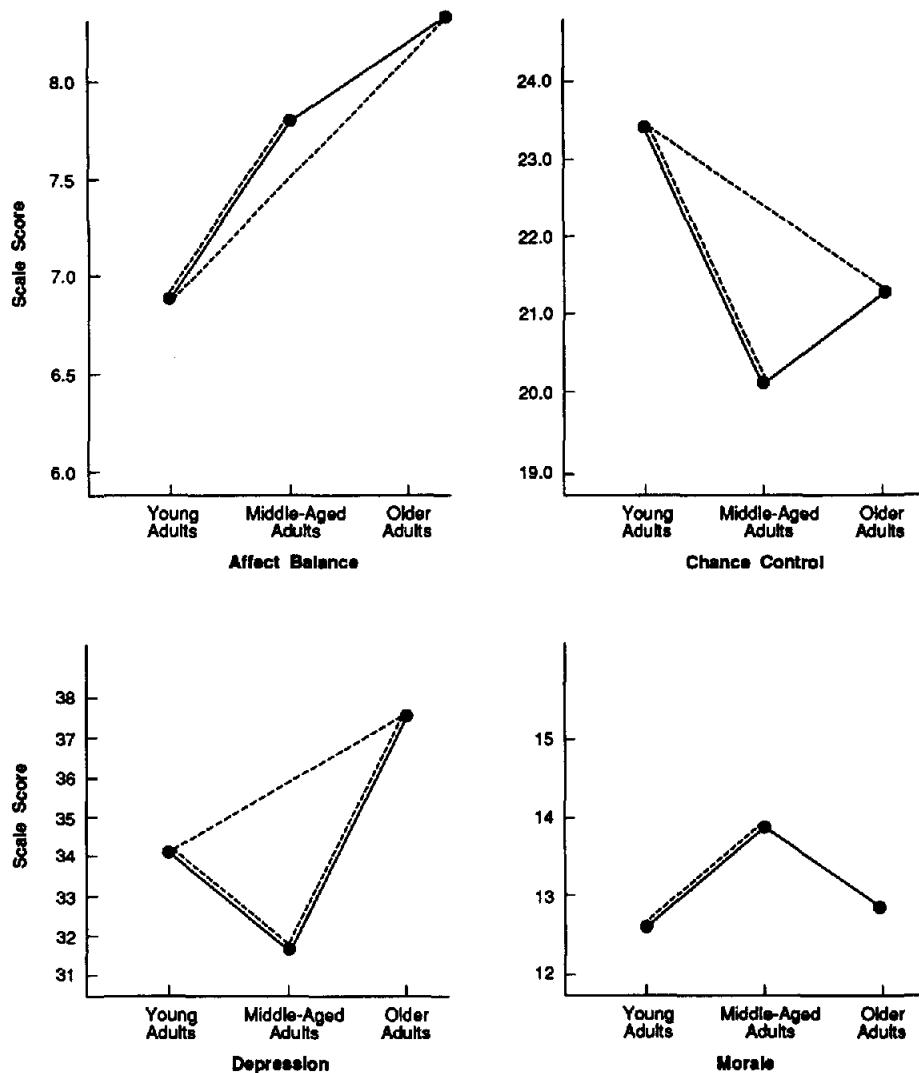


Figure 2. Age differences on prior indexes of well-being. (A dashed line indicates significant difference.)

cal research (Reker, Peacock, & Wong, 1987). However, in both of these new directions, goals and life purposes (or the conflicts and difficulties associated with them) have been formulated as *antecedents* to psychological well-being, operationalized with the usual affective indexes. The crux of the present argument is that these goals and directions in life are, in themselves, central criteria of psychological well-being. Moreover, as Waterman (1984) has stressed, realizing one's goals or purpose in life is not always easy—it requires effort and discipline, which may at times be at odds with short-term happiness.

Beyond the major goal of reexamining the essential meaning of psychological well-being, this inquiry also addressed the life course patterning of multiple aspects of positive psychological functioning. The predictions from life span theories received only partial support; self-ratings for environmental mastery were, as expected, high in middle age, but they were also high in the self-perceptions of aged persons. Self-acceptance, on the

other hand, showed no age variations, and autonomy ratings were most prominent among middle-aged respondents. The mixed support for the age predictions may reflect the fact that each newly constructed dimension of well-being was derived from the integration of several conceptual frameworks, not just life span formulations.

When compared with the prior well-being literature, the age differences reveal points of convergence as well as divergence. For example, prior studies (some cross-sectional, others longitudinal) have shown that aged persons are not less happy or do not suffer from lower self-esteem than younger age groups (Bengtson, Reedy, & Gordon, 1985; Herzog et al., 1982). These results reinforce such claims, showing no age differences in self-esteem and even incremental levels of happiness (affect balance) across age groups. At the same time, the findings reveal higher levels of depression (although not in the range of clinical depression) with age, concomitant with lower levels of pur-

Table 6
Regression Analyses

Criterion and predictor	B	β	R^2
New scales			
Self-Acceptance			
Finances	8.79	0.34	.18
Health	5.09	0.22	.23
Marital status	4.73	0.13	.24
Positive relations with others			
Sex	7.24	0.23	.04
Finances	3.36	0.15	.07
Health	2.66	0.11	.09
Autonomy			
Finances	3.36	0.17	.03
Environmental Mastery			
Finances	7.49	0.34	.17
Health	4.67	0.21	.20
Age	.13	0.20	.24
Purpose in Life			
Finances	6.53	0.30	.14
Health	4.74	0.21	.19
Age	-0.12	-0.18	.20
Marital status	4.36	0.14	.21
Personal growth			
Health	2.82	0.15	.05
Age	-0.11	-0.22	.08
Education	1.00	0.16	.10
Sex	3.52	0.14	.12
Finances	2.54	0.14	.13
Former scales			
Life Satisfaction			
Finances	1.64	0.32	.16
Marital status	1.31	0.18	.19
Health	0.74	0.14	.21
Affect Balance			
Age	0.02	0.24	.12
Marital status	0.73	0.19	.16
Finances	0.41	0.15	.18
Self-Esteem			
Finances	0.79	0.28	.12
Marital status	0.60	0.15	.14
Health	0.37	0.13	.16
Internal Control			
Age	-0.07	0.16	.03
Powerful Others			
Finances	-2.03	-0.22	.05
Chance Control			
Age	-0.05	-0.18	.04
Finances	-1.49	-0.17	.07
Depression			
Health	-2.52	-0.24	.11
Marital status	-3.06	-0.22	.14
Age	0.07	0.26	.17
Education	-0.52	-0.14	.19
Finances	-1.21	-0.12	.21
Morale			
Finances	0.89	0.19	.09
Marital status	1.27	0.20	.14
Health	0.68	0.14	.16
Education	0.22	0.13	.18

Note. F values for all coefficients significant at $p < .01$ or greater.

pose in life and personal growth. Thus, within the limitations of cross-sectional inference, the results point to a highly differentiated profile of psychological functioning across the adult life cycle. This mix of possible increments in some aspects of well-being with aging and decrements in others is particularly significant given the positive selection bias of the present sample. It appears that even well-educated, healthy, economically comfortable older adults face significant challenges in their efforts to maintain a sense of purpose and self-realization in later life.

Sex differences obtained for the standard indexes of psychological well-being underscore the recurrent observation of women's more troubled psychological profiles (Diener, 1984; Veroff et al., 1981). Female respondents had lower levels of internal control and morale, as well as higher levels of depression. The theory-guided dimensions of well-being, however, revealed advantages for women in terms of positive relations with others and a trend toward higher scores on personal growth. Thus, the new formulation affords a less dismal view of female-male contrasts in psychological well-being, with women showing strengths on the interpersonal dimension, which has been stressed as being central to female conceptions of development (Gilligan, 1982).

The primary thrust of this inquiry has been descriptive, that is, to operationalize basic contours of well-being and to chart self-ratings on these dimensions as a function of age and sex. I have argued elsewhere that the usual disciplinary preference for explanatory over descriptive research (Ryff, 1987) frequently impedes careful formulation of the central constructs psychologists seek to explain. The literature on psychological well-being is but one example of this phenomenon. Still, more probing questions that would account for variation on these measures are essential to advancement of knowledge in this domain. Prior attempts to predict why some Americans are happier than others have focused almost exclusively on sociodemographic variables (i.e., education, social class, age, ethnicity, marital status). These studies have repeatedly demonstrated that, even in combination, such variables account for little of the variance in well-being (Herzog et al., 1982; Larson, 1978). The present effort to predict well-being scores with sociodemographic variables met with similar results. Thus, there is a clear need for enriched theoretical guidance in attempts to identify the critical influences on well-being and to formulate the mechanisms by which these influences occur (Diener, 1984). Perhaps looking beneath the broad social structural factors to the life experiences and opportunities they afford or deny would provide a more promising avenue for explanatory research.

A final comment follows from the observation that theories of positive psychological functioning are essentially manifestations of middle-class values (Ryff, 1985). From this perspective, the present study may be faulted for creating yardsticks of self-evaluation that are unattainable, unattractive, or irrelevant for individuals at different locations in the social structure. This awareness that culture, history, ethnicity, class, and so on give rise to different, perhaps competing, conceptions of well-being (Coan, 1977) has been neglected in much prior theorizing in this domain. However, such recognition need not paralyze the scientific study of positive psychological functioning. Rather, it

should lead to new targets of empirical inquiry such as studies that assess the fit between theoretical conceptions of well-being and the values and ideals of those to whom they are applied (e.g., Ryff, 1989b), investigations that explore the conditions under which particular ideals of well-being are obstructed or realized, and research that probes the long-term consequences (individual and societal) of following one rather than another conception of positive psychological functioning. Thus, the conflict and competition among values that is inevitable in this domain must be viewed not as an obstacle to but as a focus of empirical study. It is these guiding ideals that afford vitality and an ever-expanding source of standards for defining psychological well-being.

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Call for Nominations

The Publications and Communications Board has opened nominations for the editorships of the Personality Processes and Individual Differences section of the *Journal of Personality and Social Psychology*, the *Journal of Experimental Psychology: Animal Behavior Processes*, *Contemporary Psychology*, *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, and *Psychology and Aging* for the years 1992-1997. Irwin Sarason, Michael Domjan, Ellen Berscheid, Alan Kazdin, and M. Powell Lawton, respectively, are the incumbent editors. Candidates must be members of APA and should be available to start receiving manuscripts in early 1991 to prepare for issues published in 1992. Please note that the P&C Board encourages more participation by members of underrepresented groups in the publication process and would particularly welcome such nominees. To nominate candidates, prepare a statement of one page or less in support of each candidate.

- For *JPSP: Personality*, submit nominations to Arthur Bodin, Mental Research Institute, 555 Middlefield Road, Palo Alto, California 94301. Other members of the search committee are Charles S. Carver, Ravenna S. Nelson, Walter Mischel, Lawrence A. Pervin, and Jerry S. Wiggins.
- For *JEP: Animal*, submit nominations to Bruce Overmier, Department of Psychology-Elliott Hall, University of Minnesota, 75 East River Road, Minneapolis, Minnesota 55455. Other members of the search committee are Donald A. Riley, Sara J. Shettleworth, Allan R. Wagner, and Jon L. Williams.
- For *Contemporary Psychology*, submit nominations to Don Foss, Department of Psychology, University of Texas, Austin, Texas 78712. Other members of the search committee are Edward E. Jones, Gardner Lindzey, Anne Pick, and Hans Strupp.
- For *Psychological Assessment*, submit nominations to Richard Mayer, Department of Psychology, University of California-Santa Barbara, Santa Barbara, California 93106. Other members of the search committee are David H. Barlow and Ruth G. Matarazzo.
- For *Psychology and Aging*, submit nominations to Martha Storandt, Department of Psychology, Washington University, St. Louis, Missouri 63130. Other members of the search committee are David Arenberg and Ilene C. Siegler.

First review of nominations will begin January 15, 1990.