

2003

# Factors contributing to life satisfaction in early and middle adulthood : a 34-year follow-up.

Joshua R. Bringle

*University of Massachusetts Amherst*

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**2003**  
**B8585**

FACTORS CONTRIBUTING TO LIFE SATISFACTION IN EARLY AND  
MIDDLE ADULTHOOD: A 34-YEAR FOLLOW-UP

A Thesis Presented

by

JOSHUA R. BRINGLE

Submitted to the Graduate School of the  
University of Massachusetts Amherst in partial fulfillment  
of the requirements for the degree of

MASTER OF SCIENCE

February 2003

Department of Psychology, Clinical Division


FACTORS CONTRIBUTING TO LIFE SATISFACTION IN EARLY AND MIDDLE  
ADULTHOOD: A 34-YEAR FOLLOW-UP

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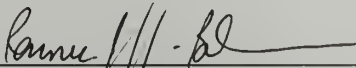
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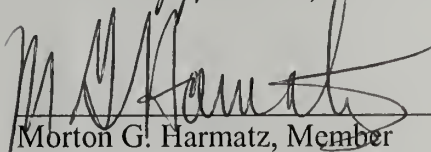
Approved as to style and content by:




Susan K. Whitbourne, Chair



Ronnie Janoff-Bulman, Member



Morton G. Harmatz, Member



Melinda Novak, Department Head  
Psychology Department

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## CHAPTER ONE

### INTRODUCTION

Clinical psychology is rooted in the study of the abnormal. Assessment, psychopathology and psychotherapy are its hallmarks and there is little mention of what constitutes positive mental health. However, being mentally healthy must be more than the absence of psychopathology. Research furthering an understanding of normal, healthy functioning and development is essential to an understanding of the abnormal and this point is seemingly overlooked as indicated by a dearth of research concerning positive functioning and an overabundance of research on psychopathology (Myers, 2000; Seligman & Csikszentmihalyi, 2000). Researchers interested in what makes select individuals aspire, achieve and thrive have identified the construct of subjective well-being (SWB). Usually identified simply as happiness, SWB is an indicator of positive mental health that encompasses a global picture of experiences, traits and aspirations that are central to an individual's happiness. The construct includes pleasant affect, a lack of unpleasant affect, life satisfaction and domain satisfaction, specifically, happiness about work or school. Research devoted to the components of SWB and the study of who is happy will subsequently inform knowledge about psychopathology and, perhaps most importantly, normal aging and positive mental health about which psychology knows little.

This project examined several factors that are theorized to contribute to an individual's well-being. Researchers claim that multiple factors contribute to an individual's happiness and studies show that some components are more important than are others in predicting SWB. Furthering this dynamic conceptualization of

SWB, in this current study, I examined several relevant factors that may contribute to an individual's happiness to investigate which are better predictors over time in a cohort sequential design.

Researchers studying the nature of well-being report that temperament and personality, typically defined within the Five Factor Model, are the strongest and most stable predictors of SWB and it is very difficult to distinguish the three constructs (Diener & Fujita, 1995; Diener, Suh, Lucas, & Smith, 1999; McCrae & Costa, 1997). Theories of personality include affect as a central component of personality structure, and theories of well-being identify positive emotions, usually happiness, as the main feature of positive functioning. The close relationship among the constructs is further illustrated in questionnaire development where there is substantial item overlap in that questions for both personality and well-being routinely assess affect (McCrae & Costa, 1991).

Some researchers go so far as to claim that SWB is a trait; however, research consistently shows that levels of SWB can fluctuate over time and across circumstances. Diener et al. (1999) note that stable personality traits can influence SWB, and thus SWB has both trait-like and state-like properties. Costa and McCrae (1984; McCrae & Costa, 1991) examined the link between personality and well-being across a ten-year period using multiple measures for both constructs. The strongest identified links were between the personality factors Extraversion (E) and Neuroticism (N) and the well-being factors of positive affect (PA) and negative affect (NA). Both cross-sectionally and longitudinally, E was related to PA, but not NA; and N was related to NA but not PA. This indicates that those personality traits are



predictors of happiness (Costa & McCrae, 1984; McCrae & Costa, 1991). These results imply that SWB and relevant features of the Five Factor model of personality are empirically related.

One possible link between SWB and personality is that some individuals are genetically predisposed to be happy. Lykken and Tellegen (1996) found that up to 80% of long-term SWB is heritable and that estimate was stable over a 10-year period for adult twins. Findings reported by Magnus et al. (1993) supported this claim as they found that measures of personality predict life satisfaction up to four years later in a sample of young adults. While SWB fluctuates in response to life stressors, it does so only to a minimal extent. The stability of well-being, similar to the stability of personality, has been referred to as the set point perspective (Mroczek & Kolarz, 1998), which states that each individual has an innate level of happiness to which he/she returns despite environmental stressors. The finding that there is variability in SWB levels indicates that it has the properties of a disposition, much like temperament, instead of the properties of a trait, such as personality factors (e.g., extraversion). Thus, although some personality factors are strong predictors of SWB, there is much more at play in determining individual differences and variation in happiness levels. Furthermore, researchers examine more than just overall happiness levels and in much more varied and dynamic terms.

Life Satisfaction (LS), a component of SWB, is a construct that researchers have operationalized as an aspect of well-being related to personal development across the life span. Ryff's model (1995) of LS includes the features of self-actualization, individuation, maturity, psychosocial development, and life-fulfillment.

Ryff also indicates that components of LS may include preventative or vulnerability factors for psychopathology (Ryff & Singer, 1998b). LS is by definition not a simple, isolated construct. Research shows that it is multidimensional and that it appears to vary predictably over time in multiple comprehensive cross-sectional surveys (Ryff & Keyes, 1995). As conceptualized by Ryff, there are six distinct attributes of LS:

- 1) Self-acceptance: possesses positive attitude toward self, acknowledges and accepts good and bad aspects of self, feels positive about past life.
- 2) Positive relations with other: has healthy relationships with others, concerned about the welfare of others, capable of empathy, affection and intimacy, understands the give/take of human relationships.
- 3) Autonomy: self-determined and independent, can resist social pressures, regulates behavior from within, evaluates self by personal standards.
- 4) Environmental Mastery: competent in dealing with the environment, controls complex array of external activities, makes use of opportunities, able to choose or create contexts suitable to personal needs and values.
- 5) Purpose in life: has goals in life and a sense of direction, feels there is meaning to present and past life, thinks life has purpose, has aims and objectives for living.
- 6) Personal growth: has a feeling of continued development, sees self as growing and expanding, open to new experiences, sees improvement in self over time, changes in ways that reflect more self-knowledge and effectiveness.

Ryff and her colleagues operationalized these six dimensions into the Psychological Well-being Scale (PWBS) with structured self-report scales that have demonstrated high internal reliability and high temporal reliability (Ryff, 1989a). The scales correlate modestly and positively with existing measures of positive functioning and correlate modestly and negatively with existing measures of negative functioning (Ryff & Singer, 1998a; Schutte & Ryff, 1997). Across studies, personal growth and purpose of life show decreases in older samples (65+) while environmental mastery consistently appears to increase over time. In several studies, self-acceptance and positive relations with others are similar across ages and older samples report higher autonomy scores, especially from young adulthood (18-29) to midlife (30-64) (Ryff & Keyes, 1995). These results, which are based exclusively on cross-sectional studies, cannot demonstrate change over time. Thus, some of these age differences may be due to cohort effects. Future research will benefit from utilizing longitudinal designs to clarify whether or not these differences are due to natural developmental processes or differences in groups.

If these findings capture actual developmental processes, then some aspects of satisfaction typically improve throughout midlife and some aspects show minimal decline during old age. The temporal organization of life may, in part, explain why certain dimensions of well-being show these patterns. According to socioemotional selectivity theory (Carstensen, Isaacowitz, & Charles, 1999) perception of time can change social goals. Specifically, when one perceives time as open-ended, goals pertaining to knowledge are prioritized and when time is perceived as limited, emotional goals become more salient (Carstensen et al., 1999). These findings

indicate that young adulthood is prospective, midlife is balanced and old age is retrospective. Seen through this lens, personal growth and purpose of life are the two areas in which one would expect the most decline over time because they are primarily associated with the future. Positive relations to others, autonomy and environmental mastery are associated more with the present. Self-acceptance is more related to past functioning and a sense of reference. One might expect increases in this dimension, but research has shown that it typically stays stable (Ryff & Keyes, 1995).

In addition to research examining individual differences and their effect on SWB and related constructs, demographic factors such as age, sex, socioeconomic status (SES), and marital status have also received considerable attention. One of the most salient findings surrounding the topic of aging and demographic factors is the paradox of well-being; that older adults are at least as happy as younger age groups (Mroczek & Kolarz, 1998). In addition, there are no sex differences in level of SWB. However, Ryff (1995) found that women consistently score higher than men do on scales measuring positive relations to others and Diener et al. (1999) reported that women probably experience emotion more strongly than men do and that they experience more negative affect. Despite these findings, gender is not predictive of happiness level or satisfaction with life.

One of the most important relationships involving social indicators, and one that was used in the current study, involves marital status as a correlate of LS. Married people report greater happiness than those never married, divorced, separated or widowed and this trend is consistent for both men and women (Myers, 2000; Ross,

1995). Diener et al. (1999) concluded that marriage is a buffer against stress and that it may generate positive states of well-being. Ross (1995) took marital status apart, piece by piece, to determine what about marriage makes it such a strong correlate of well-being. The dimensions she examined were social integration, social support, economic well-being and emotional support. Based on a series of multiple regression analyses, she found that the beneficial aspects of marriage were predicted by social attachment, social support and economic well-being. In fact, social attachment was a better predictor of psychological well-being than marital status (Ross, 1995).

In further support of these findings, Baumeister and Leary (1995) state that a need to belong is a fundamental human motive and that deficits in belongingness are linked with poor physical and mental health as well as overall low well-being. In the context of families, Ryff and Singer (1996) indicate that having a family and raising children correlates strongly with the PWBS scales of purpose in life, environmental mastery and self-acceptance. Theoretically, a host of social scientists including Maslow (1968) and Erikson (1950) highlight the importance of close relationships with others for the promotion and maintenance of well-being.

Another factor considered paramount to LS is leading a life of purpose (Ryff & Singer, 1998a). Philosophers such as Bertrand Russell (1958) wrote that the virtues of being interested in all facets of life buffer against weariness and boredom. Russell (1958) furthered proposed that work gives opportunities for success and provides a continuity of purpose. There has been research conducted on the adverse effects of not working, such as unemployment, but few empirical studies have focused on the psychological and physical benefits of industry. Related to work and

involvement, income does not tend to have much influence on SWB in industrialized countries. Wealthy people are only somewhat happier than poor people in wealthy nations are, but wealthy nations are happier overall than poor ones. Myers (2000) states that, in wealthy nations, once a basic level of wealth has been achieved, income is no longer an indicator of happiness.

Easterlin and Schaeffer (1999), however, claim that the relationship between income and happiness is much more complex than Myers reports. Well-being can be decreased, they argue, if one's income varies inversely with the incomes of others. Therefore, there may be an important social comparison process at work in terms of SES and happiness. Furthering this hypothesis, researchers state that a life-course perspective may add valuable information to our understanding of the relationship between finances and happiness. George's (1992) findings indicate that finances may play less of a role in indicating one's happiness over time. Status attainment may play a role in determining SWB levels before retirement, but status maintenance is more important after retirement.

The current study examines the predictive ability of specific personality variables to Life Satisfaction scores. Research indicates that personality factors are reliable predictors of SWB. Erikson (1950) theorized that increased psychosocial maturity and continued personality development would relate to increased satisfaction in life. Specifically, "Each individual, to become a mature adult, must to a sufficient degree develop all the ego qualities mentioned and recognize in each other the final stage of integrity...At any given stage of the life cycle the solution of one more

nuclear conflict adds a new ego quality, a new criterion of increasing strength" (Erikson, 1950); p. 232, 233).

The current study utilized the Eriksonian based Inventory of Psychosocial Development (IPD); (Constantinople, 1969) as a measure of personality. The IPD is based on Erikson's proposed eight psychosocial crises. The eight scales of the IPD have been operationalized from the following eight stages: Stage 1: trust versus mistrust; Stage 2: autonomy versus shame and doubt; Stage 3: initiative versus guilt; Stage 4: industry versus inferiority; Stage 5: identity versus identity diffusion; Stage 6: intimacy versus isolation; Stage 7: generativity versus stagnation; Stage 8: ego integrity versus despair.

Specifically, two scales were expected to predict LS. Erikson (1950) defines intimacy (Stage 6) as the ability to thrive in the face of self-abandon. This quality is necessary in sexual unions and especially in close relationships, which require loving someone unconditionally (Erikson, 1950). Gender and marital status were expected to moderate the link between intimacy and LS. Female participants were expected to report higher resolution of intimacy on the IPD than male participants, and, increased intimacy should be a stronger predictor for LS. Females are socialized differently than males to be more invested in relationships and less independent (Cross & Madson, 1997). Married participants are expected to show higher levels of intimacy than those never married or divorced and that should predict higher life satisfaction. Previous research indicates that marriage is a buffer against stress and that social support and social attachment predict increased life satisfaction (Diener et al., 1999; Ross, 1995).

Gender and job prestige were expected to moderate the link between industry (Stage 4) on the IPD and LS on the PWBS. Industry is defined by Erikson as the ability to adjust to and master the inorganic laws of the tool world, produce and provide for one's self and others, and the ability to learn the qualities of work completion and diligence (Erikson, 1950). In line with the aforementioned socialization theory, we expected males to show higher resolution of industry due to an increased sense of independence and individualism (Cross & Madson, 1997), and industry should be a stronger predictor for males' satisfaction with life. Quality of current job is expected to relate to increased LS, and that should predict higher satisfaction with life, as research has shown very small effects that the wealthy are happier than the poor, that material resources can, in some situations, relate strongly to SWB, and that economic security is a predictor of LS (Myers, 2000; Ross, 1995). Furthermore, increased prestige is likely to allow one to be free from the negative consequences of social comparison (Easterlin & Schaeffer, 1999).



## CHAPTER TWO

### METHOD

#### Design and Participants

The current study is based on a subset of a 34-year cohort-sequential study on personality development (Whitbourne, Zuschlag, Elliot, & Waterman, 1992). The IPD (Constantinople, 1969), among other questionnaires, has been given to University of Rochester alumni since 1966 at approximately 11-year intervals. Three cohorts have been classified in the study based on the year of testing (i.e., 1966-68, 1977-78, 1988-89) that they were initially assessed while in college. To ease the presentation of results from the current study, time of testing is rounded off to 1966, 1977, 1988 and 2000. Age is rounded off to 20, 31, 42 and 54, although the mean age for each cohort varied slightly around the chosen age values. At the 2000 testing, Cohort 1 respondents ranged in age from 52 to 56 ( $M = 54.25$ ,  $SD = 1.07$ ), Cohort 2 respondents ranged in age from 41 to 46 ( $M = 43.38$ ,  $SD = 1.31$ ), and Cohort 3 respondents ranged in age from 29 to 42 ( $M = 31.93$ ,  $SD = 2.09$ ).

Cohort 1, first tested in 1966, originally consisted of 347 participants, 180 men (52%) and 166 women (48%). In the 2000 testing, 105 completed testing, 59 men (56%) and 46 women (44%). Cohort 2, first tested in 1977, originally consisted of 298 participants. In the 2000 testing, 73 participants, 27 men (37%) and 46 women (63%), successfully returned questionnaires representing 24.4% of the original sample. This large attrition was due, in part, to the University of Rochester changing its record keeping system during the interval between 1977 and 1988. Finally, Cohort 3 was first tested in 1988 and consisted of 292 participants: 181 (62%) men and 111

(38%) women. In the 2000 follow-up, 55 participants completed the testing representing 18.8% of the original college sample; 34 were men (62%) and 21 were women (38%). The total sample for the current study consists of 233 participants, 120 males (52%) and 113 females (48%).

### Measures

Inventory of Psychosocial Development. The 80-item IPD is a measure of Erikson's eight-stage theory of psychosocial development. Constantinople (1969) developed the first six subscales in cross-sectional and longitudinal studies of University of Rochester students in the mid 1960's. This 60-item questionnaire was used in the first testing of Cohort 1. The current IPD yields eight stage scores with five positive items and five negative items contributing to each score. Respondents are asked to indicate how characteristic or uncharacteristic a given item is of them on a 7-point Likert-type response scale. Difference scores are obtained for each stage score by subtracting the summed score of the negative items from the summed score of the positive items. For each stage, the range of possible scores is from -35 to +35.

Psychological Well-being Scale. The Psychological Well-being Scale operationalizes the aforementioned six dimensions of LS (self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, personal growth) (Ryff, 1989). It is a 60-item scale on which respondents rate themselves on each item according to a 6-point Likert-type scale ranging from strongly agree to strongly disagree. Across studies, the scale has demonstrated high internal consistency, high test-retest reliability, and high construct validity based on positive and significant correlations with existing measures of positive functioning and

negative and significant correlations with existing measures of negative functioning. Furthermore, confirmatory factor analyses provided support for the six proposed dimensions of LS with a single, second order super factor.

Marital status. Marital status was assessed by an open-ended question on a demographics questionnaire asking participants to list their history of interpersonal commitments. Participants indicated when and for how long they had been married, when divorces occurred or whether or not they had, or currently were, living with a significant other. Marital status was conceptualized as being currently married, engaged to be married or living with a significant other. In the sample, 81% of the respondents (n=175) reported being married, engaged to be married or cohabitating with a significant other.

Job prestige. Job prestige was also assessed on the demographics questionnaire by means of an open-ended question asking participants to chart their employment history since graduating from college. Prestige was coded by using the National Opinion Research Center's prestige scores (NORC, 1989). The possible range of prestige scores is 17 –86 and the range of prestige scores in the current sample is 30-86 with a mean of 62. A mean prestige score of 62 indicates that the typical participant in our study has a job comparable to that of an industrial engineer, airline pilot or physical therapist all of which are coded at that level. This indicates that the typical participant in the sample has attained either higher education above and beyond a college degree or received specialized training.

## Procedure

In the summer of 2000, a questionnaire packet containing an informed consent, a demographics page with an open-ended question regarding current and past employment, the IPD, a debriefing form, and the PWBS was compiled. After an initial preparatory phase in which addresses were compiled for all study participants, questionnaire packets were sent to each address obtained. Cover letters were included that reminded participants of the importance of their responses and their previous participation in earlier studies. Approximately one month after the initial questionnaire was mailed, a follow-up questionnaire was mailed to nonrespondents urging them to complete and return their packets. Participants who had still not responded were emailed. Email addresses were obtained from the University of Rochester's Online Directory. From Cohort 1, out of 13 attempted emails, four participants completed the study at the most recent follow-up. Seven participants from Cohort 2 were contacted via email out of the 18 emails that were sent. From Cohort 3, out of a possible 20 emails sent, five additional participants were located and participated. Phone numbers were also available for some participants from Cohorts 2 and 3 from their college assessment materials. Phone calls were made to nine participants from Cohort 2 but they did not yield any additional participants. Phone calls were made to 119 participants from Cohort 3 and this resulted in 12 additional participants.

## CHAPTER THREE

### RESULTS

Hierarchical multiple regressions were conducted using college personality scores (Stages 4 and 6) to predict life satisfaction in later life on participants from the three cohorts. A regression was run for each of the six LS variables; thus, there were 12 planned analyses. The first step of the hierarchical regression contained the factors hypothesized to moderate the relationship between each of the personality variables and current life satisfaction. For the personality variable industry vs. inferiority, the likely moderating factors are gender, job prestige and cohort. The second step involved entering industry scores into the equation. The final step included entering possible the interactions of Gender x Industry, Prestige x Industry and Gender x Prestige.

<u>Block One:</u> Gender Job Prestige Cohort	<u>Block Two:</u> Industry (Stage 4)	<u>Block Three:</u> Gender x Industry Prestige x Industry Gender x Prestige	<u>Dependent Variable:</u> Life Satisfaction (6 Scales)
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The same design was used for the personality variable of intimacy vs. isolation and the moderating factors of gender, marital status and cohort.

<u>Block One:</u> Gender Marital Status Cohort	<u>Block Two:</u> Intimacy (Stage 6)	<u>Block Three:</u> Gender x Intimacy Marital Status x Intimacy Gender x Marital Status	<u>Dependent Variable:</u> Life Satisfaction (6 Scales)
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As hypothesized, higher resolution of the IPD stages industry and intimacy was found to be positively associated with increased satisfaction with life (See Table 1). Specifically, college industry scores predicted environmental mastery ( $R^2=.075$ ,

B=.167, SE=.055,  $p<.002$ ), positive relations with others ( $R^2=.070$ , B=.188, SE=.059,  $p<.002$ ), purpose in life ( $R^2=.098$ , B=.208, SE=.050,  $p<.001$ ), and self-acceptance ( $R^2=.068$ , B=.196, SE=.066,  $p<.003$ ) in adulthood. Higher resolution of industry did not predict autonomy or personal growth. Furthermore, none of the interactions was significant. This finding is in line with previous research that states that demographics are less salient predictors of life satisfaction or overall happiness. There was a main effect for cohort predicting environmental mastery ( $R^2=.075$ , B=-1.28, SE=.595,  $p<.032$ ) but as this was found in only one regression, it is not as stable a predictor as are personality variables. All estimates of tolerance in these analyses ranged from .879 to .976, thus results were not affected by multicollinearity, nor were there any outliers present in the sample.

Similarly, college intimacy scores were significant predictors of life satisfaction in later life. Specifically, college intimacy scores predicted autonomy ( $R^2=.045$ , B=.176, SE=.063,  $p<.006$ ), environmental mastery ( $R^2=.131$ , B=.266, SE=.061,  $p<.001$ ), personal growth ( $R^2=.097$ , B=.219, SE=.052,  $p<.001$ ), positive relations with others ( $R^2=.149$ , .335, SE=.066,  $p<.001$ ), purpose in life ( $R^2=.117$ , B=.275, SE=.057,  $p<.001$ ), and self-acceptance ( $R^2=.099$ , B=.335, SE=.074,  $p<.001$ ) in later life. As with regressions involving industry scores, none of the interactions approached significance. In these analyses, there were no significant cohort effects. As with the regressions involving industry scores, measurements of tolerance were all higher than .970 indicating that multicollinearity did not affect the results. There were also no outliers present in intimacy scores.

Each of the six well-being scales of the PWBS had high reliability. However, all of the six well-being variables were found to be highly correlated with one another (See Table 2). Mean scores for the six subscales of the PWBS as well as mean scores for the IPD scales industry and intimacy are shown by gender in Table 3. There were no significant gender differences in either IPD scores or PWBS scores.

## CHAPTER 4

### DISCUSSION

Results support the hypothesis that increased levels of psychosocial maturity from college were related to life satisfaction later in adulthood. College industry scores were significant predictors of environmental mastery, positive relations with others, purpose in life and self-acceptance later in life. College intimacy scores were significant predictors of autonomy, environmental mastery, positive relations with others, purpose in life, self-acceptance and personal growth later in life. While one might expect intimacy to be negatively correlated with autonomy, this result is most likely significant because the scales of the Psychological Well-being Scale are positively correlated with one another.

Ryff (1989a) concludes that the intercorrelations between the scales of the PWBS are expected, as they are all facets of psychological well-being. There is nevertheless a concern that if the intercorrelations become too strong, subscales are measuring the same construct. Ryff has found the subscales self-acceptance and environmental mastery and self-acceptance and purpose in life to be strongly correlated. In a non-representative, community sample of 321 men and women, Ryff (1989a) found those two correlations to be .76 and .72 respectively (both  $p < .001$ ). In the current study, the highest correlations between scales were also self-acceptance and environmental mastery ( $r = .786$ ) and self-acceptance and purpose in life ( $r = .653$ ). When the PWBS was given to a nationally representative sample, intercorrelations between the scales remained significant at the .05 level, but dropped considerably to .13-.46 (Ryff & Keyes, 1995). Thus, the psychometric properties of the PWBS in the



current study are nearly identical to previous research on similar sized samples. This further indicates that the six subscales are both reliable and valid measures of life satisfaction in this sample.

Interestingly, there were no significant interactions based on demographic variables for either set of regressions. Participants' gender did not moderate the link between either industry or intimacy and LS. Similarly, neither participants' marital status nor their level of job prestige moderated the link between psychosocial development at college and LS later in adulthood. The lack of significant results regarding gender differences is also in line with previous research on general happiness levels that indicates that there are few gender differences in overall well-being (Diener et al., 1999; Myers, 2000). In the current study, t-tests indicate that there were no significant gender differences on any of the six life satisfaction scales. One finding regarding gender that is specific to the Psychological Well-being Scale that was not replicated is that, across multiple cross-sectional studies, women consistently score higher than men on the scales positive relations with others and personal growth (Ryff, 1995).

Gilligan (1982) has theorized that women's development is less autonomous and based in individualism and more likely to be grounded in interpersonal relationships. Ryff indicates that these findings are important in differentiating between gender-based vulnerabilities and strengths. These factors are relevant both when considering the higher incidence of psychological disorders, such as depression, among women and also in light of women being socialized to be more invested in relationships than men (Cross & Madson, 1997; Ryff, 1995). The lack of significant

findings here is puzzling and may be a feature of the sample. Not only were there no significant gender differences in terms of life satisfaction, there were also no significant gender differences in the two subscales of the IPD. The sample in the current study is very homogenous. In a more diverse sample, it is likely that there would be more variability in scores, which would provide a richer portrait of the relationship between personality, gender and life satisfaction.

The absence of significant gender differences in this sample may also be related to the lack of significant findings regarding marital status. I expected married participants to show higher levels of intimacy than those never married or currently divorced, which should have predicted higher life satisfaction. It is unclear why this finding was not replicated, as marital status, specifically social attachment, social support and economic well-being associated with many marriages, is a consistent predictor of overall happiness (Myers, 2000; Ross, 1995). The fact that 81% of the sample is married, engaged to be married or cohabiting with a significant other may play an important role in this finding as a majority of the sample is involved in a situation where they may enjoy the factors of being in an intimate relationship found to be beneficial to overall well-being.

Though there have been small effects reported that indicate that there is some relationship between wealth and happiness, the lack of significant findings regarding job prestige and life satisfaction are in line with other previous research (Diener et al., 1999; Myers, 2000). Most findings on economic resources and income levels indicate that once a minimal level is achieved, there are no significant differences in overall happiness levels. This finding may also be explained by the fact that the

sample in the current study attended an exclusive private university and is not representative of the population at large in terms of socioeconomic status.

There was only one significant finding indicating that there are cohort differences within the sample. These findings add to previous research that indicates that levels of life satisfaction and overall happiness do not show differences throughout adulthood (Diener & Diener, 1996; Mroczek & Kolarz, 1998; Myers & Diener, 1995; Ryff, 1989b). Not replicated were findings that there are significant age differences on the Psychological Well-being Scale. Ryff (1995; Ryff & Singer, 1996) has found in cross-sectional studies that older participants score higher on the scales autonomy and environmental mastery, while younger participants score higher on the scales purpose in life and personal growth. There are no consistent findings of differences among ages in the scales self-acceptance and positive relations with others. Failure to replicate these findings may be due to age differences between the sample in the current study and those used in Ryff's research. In her studies, Ryff divided her samples into young adults (under 22), middle-aged adults (23-64) and older adults (65+) (Ryff, 1989a; Ryff & Keyes, 1995; Ryff & Singer, 1998a). The three cohorts in the current study all fit into Ryff's middle-aged adult grouping; thus previously observed age differences may not be present in the current sample.

The results that indicate that increased psychosocial maturity from college is related to higher levels of LS later in life is consistent with previous findings on the nature of well-being. Research consistently shows that personality is the most stable predictor of happiness over time (Diener et al., 1999; McCrae & Costa, 1997) and the findings in the current study provide further support for this claim. The finding is a

consistent one in the study as well. Ten of the twelve regressions ran showed that higher resolution of psychosocial maturity is a significant predictor of well-being. Though the scales of the Psychological Well-being scale are significantly correlated with one another, this is still a strong finding that supports the predictive utility of the Inventory of Psychosocial Development.

Some limitations of the current study include the aforementioned homogeneity of the sample. All of the participants attended a small, private university and all graduated. Almost 100% of the sample is Caucasian, and 81% of the participants are functionally married; thus, the results are not generalizable to the population at large. Attrition has been a problem over the past 36 years and that may cause the sample to be even more select and not represent the true range of either psychosocial development scores or life satisfaction scores. Future research examining the predictive utility of individual differences to life satisfaction will need to utilize a much larger, nationally representative sample that is maintained and tested within the context of a longitudinal or cohort sequential design. Under these circumstances, I would still expect that personality development would be related to satisfaction with life, but other findings consistent with previous research on the PWBS are more likely to be replicated. For example, gender differences on certain subscales would be more likely to be seen and the relationship between marital status and life satisfaction would be ubiquitous in a more representative sample.

Regardless, these results provide important support for the claim that personality, specifically psychosocial maturity, is an important predictor of life satisfaction throughout middle adulthood. Previous research indicates that an

Eriksonian based conception of personality development is an important and understudied component of personality (Whitbourne et al., 1992). This study further adds to its importance by exploring the predictive utility of two of its constructs to a dynamic conceptualization of life satisfaction. The cohort sequential design allows a conclusion meriting that early developmental processes and successes are indeed important for later happiness in three separate samples of different ages.

Table 1

Multiple Regression Analyses Predicting Psychological Well-being at 2000 Testing (N = 233)

Predictor	B	<u>SE B</u>	p
Environmental Mastery			
Intimacy	.266	.061	.001
Industry	.167	.055	.002

Predictor	B	<u>SE B</u>	p
Positive Relation with Others			
Intimacy	.335	.066	.001
Industry	.188	.059	.002

Predictor	B	<u>SE B</u>	p
Purpose in Life			
Intimacy	.275	.057	.001
Industry	.208	.050	.001

Predictor	B	<u>SE B</u>	p
Self-Acceptance			
Intimacy	.335	.074	.001
Industry	.196	.066	.003

Predictor	B	<u>SE B</u>	p
Personal Growth			
Intimacy	.219	.052	.001
Industry	7.5E-02	.05	ns

Predictor	B	<u>SE B</u>	p
Autonomy			
Intimacy	6.3E-2	.06	.006
Industry	.178	.063	ns

Table 2

Intercorrelations Between Subscales for the Psychological Well-being Scale

Subscale	1	2	3	4	5	6
1. Autonomy	--	.414**	.414**	.240**	.415**	.430**
2. Environmental Mastery		--	.411**	.461**	.552**	.786**
3. Personal Growth			--	.431**	.507**	.460**
4. Positive Relations with Others				--	.495**	.547**
5. Purpose in Life					--	.653**
6. Self-Acceptance						--

\*\* p < .01

Table 3

Reliability Coefficients for the Psychological Well-being Subscales

Subscale	Alpha
Autonomy	.7969
Environmental Mastery	.8103
Personal Growth	.7870
Positive Relations with Others	.8371
Purpose in Life	.7942
Self-Acceptance	.8892

Table 4  
Comparisons of Scores on the Inventory of Psychosocial Development and the Psychological Well-being Scale by Gender

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<u>IPD Scales</u>	<u>M</u>	<u>Males</u>		<u>M</u>	<u>Females</u>	
		<u>S.D.</u>	<u>n</u>		<u>S.D.</u>	<u>n</u>
Industry	7.5	8.9	120	9.2	8.2	113
Intimacy	10.9	8.2	120	12.4	6.8	113
<u>PWBS Scales</u>			120			113
Autonomy	40.7	6.5	120	40.8	7.5	113
Environmental Mastery	42.4	6.4	120	40.9	7.4	113
Personal Growth	44.7	6.1	120	45.1	5.5	113
Positive Relations to Others	43.7	7.5	120	42.7	7.3	113
Purpose in Life	44.5	6.3	120	43.8	6.3	113
Self Acceptance	42.5	8.1	120	42.1	8.3	113

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Note. None of the differences was statistically significant  $p < .05$ .



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