

IZA DP No. 742

Building a Better Theory of Well-Being

Richard A. Easterlin

March 2003

Building a Better Theory of Well-Being

Richard A. Easterlin

*University of Southern California
and IZA Bonn*

Discussion Paper No. 742
March 2003

IZA

P.O. Box 7240
D-53072 Bonn
Germany

Tel.: +49-228-3894-0
Fax: +49-228-3894-210
Email: iza@iza.org

This Discussion Paper is issued within the framework of IZA's research area *Welfare State and Labor Market*. Any opinions expressed here are those of the author(s) and not those of the institute. Research disseminated by IZA may include views on policy, but the institute itself takes no institutional policy positions.

The Institute for the Study of Labor (IZA) in Bonn is a local and virtual international research center and a place of communication between science, politics and business. IZA is an independent, nonprofit limited liability company (Gesellschaft mit beschränkter Haftung) supported by the Deutsche Post AG. The center is associated with the University of Bonn and offers a stimulating research environment through its research networks, research support, and visitors and doctoral programs. IZA engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public. The current research program deals with (1) mobility and flexibility of labor, (2) internationalization of labor markets, (3) welfare state and labor market, (4) labor markets in transition countries, (5) the future of labor, (6) evaluation of labor market policies and projects and (7) general labor economics.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available on the IZA website (www.iza.org) or directly from the author.

ABSTRACT

Building a Better Theory of Well-Being*

What do social surveys of life cycle experience tell us about the determinants of subjective well-being? First, that the psychologists' setpoint model is wrong. Life events in the nonpecuniary domain, such as marriage, divorce, and physical disability, have a lasting effect on well-being, and do not simply deflect the average person temporarily above or below a setpoint given by genetics and personality. Second, mainstream economists' inference that in the pecuniary domain "more is better," based on revealed preference theory, is wrong. An increase in income, and thus in the goods at one's disposal, does not bring with it a lasting increase in well-being, because of the negative effect on utility of hedonic adaptation and social comparison. The utility anticipated ex ante from an increase in consumption turns out ex post to be less than expected, as one adapts to the new level of living, and as the living levels of others improve correspondingly.

A better theory of well-being builds on the evidence that adaptation and social comparison affect utility more in pecuniary than nonpecuniary domains. The failure of individuals to anticipate that these influences disproportionately undermine utility in the pecuniary domain leads to an excessive allocation of time to pecuniary goals at the expense of nonpecuniary goals, such as family life and health, and reduces well-being. There is need to devise policies that will yield better-informed individual preferences, and thereby increase individual and societal subjective well-being.

JEL Classification: D60, I10, I31, J12, Z13

Keywords: subjective well-being, living level, health, marital status, aspirations

Richard A. Easterlin
Department of Economics
University of Southern California
Los Angeles, CA 90089-0253
USA
Tel.: +1 213 740 6993
Fax: +1 213 740 8543
Email: easterl@usc.edu

* Prepared for presentation at the conference "Paradoxes of Happiness in Economics," University of Milano-Bicocca, March 21-23, 2003. This paper builds substantially on prior work by other scholars, especially, in economics, Robert H. Frank, Andrew J. Oswald, Tibor Scitovsky, and Bernard M.S. van Praag; and in psychology, Paul T. Costa, Robert R. McCrae, David G. Myers, and, for their path-breaking volume on well-being, Daniel Kahneman, Ed Diener, and Norbert Schwarz. Finally, my thanks to James A. Davis, Tom W. Smith, and Ruut Veenhoven for their invaluable data collections, without which this work would not have been possible. I am grateful too for the excellent assistance of Donna Hokoda Ebata, Pouyan Mashayekh-Ahangarani and Paul Rivera. Financial assistance was provided by the University of Southern California.

1. Introduction

I take the terms well-being, utility, happiness, life satisfaction, and welfare to be interchangeable and measured by the answer to a question such as that asked in the United States General Social Survey (GSS): “Taken all together, how would you say things are these days – would you say that you are very happy, pretty happy, or not too happy?”¹ A substantial methodological literature has developed on the reliability, validity, and comparability of the answers to such questions (Diener, 1984, Frey and Stutzer, 2002ab, Veenhoven, 1993). For the present purpose, I take the responses to be meaningful and reasonably comparable among groups of individuals, and focus on the determinants of happiness, so measured.

The title of this paper, “Building a Better Theory of Well-being,” raises the question, “Better than what”? My answer is, better than the prevailing theories of well-being in psychology and economics. This is not to suggest that there is unanimity in either field; the theories discussed below are what one might view as the central tendency of each discipline. I try to take advantage here of work in both fields plus social survey data to suggest the shape of a theory more consistent with what people have to say about their feelings of well-being.

In psychology, the tendency is towards “setpoint theory.”² Each individual is thought to have a setpoint of happiness given by genetics and personality. Life events such as marriage, loss of a job, and serious injury may deflect a person above or below this setpoint, but in time hedonic adaptation will return an individual to the initial setpoint. One setpoint theory writer states flatly that objective life circumstances have a negligible role to play in a theory of happiness (Kammann, 1983, p. 18).

¹ The same question may be asked with more response options, for example, by presenting the respondent with an integer ladder from 0 to 10 and asking where on the ladder the respondent currently stands.

² See Costa et al, 1987; Cummins et al., 2003; Lykken and Tellegen, 1996; Myers, 1992. For a differing view by a psychologist, see Argyle, 1999. A good critical summary of the setpoint model is given in Lucas, Clark, Georgellis, and Diener, 2002.

If the goal of public policy is to improve subjective well-being (SWB), this theory leads to a nihilistic view of economic and social policy. Setpoint theory implies that any measures taken to improve economic or social conditions can have only a transient effect on well-being, since each individual will in time revert to his or her given setpoint of happiness. This implication of the theory has been explicitly recognized by psychologists in the recent encyclopedic volume on hedonic well-being edited by Kahneman, Diener, and Schwarz (1999). Ed Diener and Richard E. Lucas state, for example: “The influence of genetics and personality suggests a limit on the degree to which policy can increase SWB. . . . Changes in the environment, although important for short-term well-being, lose salience over time through processes of adaptation, and have small effects on long-term SWB” (Diener and Lucas, 1999, p. 227). Moreover, if setpoint theory is correct, not only is public policy likely to be ineffective, there is little an individual can do to improve his or her well-being, except, perhaps, consult a psychologist.

In contrast, in economics, life circumstances and particularly, income and employment, are believed to have lasting effects on well-being. The prevailing theory might be termed “more is better.” As a general matter economists prefer not to theorize about subjective states of mind and to deal only with observed behavior. Their argument, termed “revealed preference,” is that if an individual is observed to buy a combination of goods, say, x_2, y_2 , when an alternative combination, x_1, y_1 is affordable with a person’s given income and prevailing prices, then (based on certain axioms) the individual is deemed to prefer x_2, y_2 to x_1, y_1 and hence, to be better off. A major implication of this theory is that one can improve well-being by increasing one’s own income, and that public policy measures aimed at increasing the income of society as a whole lead to greater well-being. Economists recognize that well-being depends on a variety of

circumstances besides material conditions, but typically they assume that if income increases substantially, then overall well-being will move in the same direction. As A.C. Pigou put it many years ago, “there is a clear perception that changes in economic welfare [the level of real income] indicate changes in social welfare in the same direction, if not in the same degree”(Pigou, 1932, p.3).

In what follows, I argue that neither the prevailing psychological nor economic theories are consistent with accumulating survey evidence on well-being, and based on this analysis, I try to sketch the outlines of a better theory. My empirical work takes, for the most part, a life cycle approach, applying the demographer’s technique of cohort analysis to survey data, usually the GSS. Generalizations about life cycle experience are obtained by following each of several cohorts over the 28-year span between 1972 and 2000 covered by the GSS. Because some cohorts are at the beginning of the adult life cycle in 1972, while others are in their middle or later years, it is possible to infer patterns over the full adult life span by bringing together the different segments of life cycle experience represented by younger and older cohorts. The total sample size of the annual surveys is typically about 1500, except after 1994 when they are almost twice as great. In what follows I sometimes use three or five year averages in order to minimize the problem of small sample size that arises when one subdivides the total sample by characteristics such as age, gender, and health, marital, or work status. The three-option happiness question is scaled from 3 = very happy to 1 = not too happy to compute mean happiness for various population groups.

2. Is there a setpoint of happiness?

Let me start with the psychological theory. The critical issue is not whether *any* adaptation to life events occurs, but whether adaptation is *complete*, that is, whether individuals return to their initial level of happiness.³ There are, in fact, psychological studies that make clear that with respect to some experiences, such as noise and cosmetic surgery, hedonic adaptation by people is typically less than complete, that is, these experiences have a lasting effect on well-being (Frederick and Loewenstein, 1999).

The survey evidence presented here suggests, in addition, that individuals do not fully adapt to changes in either health or marital circumstances. A deterioration in health has a permanently negative effect on happiness, and the more severe the deterioration in health, the greater the adverse impact. With regard to marital status, the formation of unions has a positive and lasting effect on happiness; the dissolution of unions, a permanently negative effect. Needless to say, I am speaking of averages; there is considerable dispersion about the mean.

2.1 Health and happiness

The seminal article repeatedly cited in the psychology literature as demonstrating adaptation to adverse changes in health is a study by Brickman, Coates, and Janoff-Bulman (1978). This article reports that serious accident victims (paraplegics and quadriplegics), when compared with a group of controls, “did not appear nearly as unhappy as might have been expected” (p. 921).

The sample size in this analysis is very small (29 accident victims versus 22 controls). The problem of small sample size is aggravated by the dubious comparability of the controls, who are

³ The time dimension of adaptation seems to be overlooked in the psychological literature. Does complete adaptation mean return to the setpoint within a day, month, year, decade, or more? I suggest that adaptation that requires around a decade or more to return to the initial level is not complete adaptation, because a departure from the setpoint for as long as a decade amounts to perhaps one-sixth of the adult life span, a considerable spell of exhilaration or depression.

chosen from a phone book because they “lived in approximately the same areas of the city as . . . lottery winners[a third and quite different group in the analysis]” (p. 919). In any event, the study does *not* find that accident victims are as happy as controls. On the contrary, accident victims, compared with controls, “rated themselves significantly *less* happy” (p. 924, italics added). Setpoint (or “adaptation level”) theory is saved in this study only by introducing a quite different comparison, one between accident victims and what “might have been expected.” What “might have been expected” is never explained or quantified; the reader’s intuition presumably fills in the blank.

There have been a number of studies since, some supporting the notion of complete adaptation, others contradicting it. Most of these suffer from similar problems of sample size or other shortcomings. To my knowledge the most comprehensive and careful investigation is one that examines the life satisfaction (on a 5 point scale) of a *national* sample of persons reporting disabling conditions (n = 675) and compares them with a *national* sample of nondisabled persons (n=1064) (Mehnert, Kraus, Nadler, and Boyd, 1990).

What does this study find? First, the life satisfaction of those with disabilities is, on average, significantly less than those who report no disabilities (Table 1). Second, within the disabled group, happiness is less for those with greater difficulties. Life satisfaction is lower, the more severe the disabling condition (see Table 2, item 1). Life satisfaction is less for those who have more than one disabling condition (item 2). Those with mental, physical or “other serious health” disabilities are less satisfied with their lives than those with sensory disabilities (item 3). The more limited one is in daily activities, the less satisfied he or she is (item 4). Finally, if one’s disability is more likely to be noticed by persons who know the respondent fairly well, life satisfaction is less (item 5).

A question is sometimes raised as to which way the causal arrow runs – from health to life satisfaction or life satisfaction to health? If health is conceived unidimensionally, a plausible a priori argument can be made that life satisfaction affects health, as well as vice-versa. But when health is characterized by a variety of physically disabling conditions, as in Table 2, it seems highly unlikely that it is differences in life satisfaction that are causing the observed variations in health problems. The more plausible inference is that greater health problems result systematically in less happiness.

Thus, the results of Tables 1 and 2 imply that, on average, an adverse change in health reduces life satisfaction, and the more adverse the change in health, the greater the reduction in life satisfaction. The results do not mean that no adaptation to disability occurs. It is reasonable to suppose that the initial impact on happiness, say, of an accident or serious disease, is greater than its long term impact. Adjustment to a disabling condition may be facilitated by health devices such as hearing aids or wheelchairs, and by a support network of friends and relatives. Moreover, the impact varies depending on the individual affected, and the extent of adaptation may depend, among other things, on personality characteristics. But the evidence does suggest that there is a lasting negative effect on happiness of an adverse change in health.

This study is based on nationally representative samples, and the systematic results relating life satisfaction to the magnitude of health difficulties are impressive. It is true, however, that it is a point-of-time investigation, and does not follow persons over the life cycle. Let me turn, therefore, to some life cycle evidence, based on sampling the same persons in a given birth cohort at successive points in time as the cohort progresses through the adult life cycle.

There is no question that among adults real health problems increase over the life cycle. But what do people *say* about their health? If adaptation were complete to adverse changes in health, then the life course trend in self-reported health should be flat.⁴ Is this the case?

In fact, self reported health declines throughout the life course. Since 1972, the GSS has asked the following question: “Would you say your own health, in general, is excellent, good, fair, or poor?” (National Opinion Research Center, 1999, p. 172). If one follows successively older ten-year-birth-cohorts for 28-year segments of the life span, one finds for each cohort a clear (and statistically significant) downtrend in mean self reported health (Figure 1). (The mean health rating is obtained by scaling the responses from excellent = 4 down to poor = 1.) The trends for women and men separately are similar to that for both sexes combined shown here. In the two oldest cohorts, the apparent leveling off of self reported health beyond age 60 is due to the truncation of the sample caused by mortality; those reporting poorer health do, in fact, die more rapidly. The conclusion suggested by the data on self reported health is the same as that for the preceding data on disability. There is not complete hedonic adaptation to adverse changes in health.⁵

Throughout the life cycle, those who report they are healthier also say they are happier. For both younger and older cohorts happiness is greater, on average, the better the state of self reported health (Table 3). This finding is consistent with the results above on life satisfaction

⁴ It would also be flat if persons implicitly evaluate their health only by comparison with others of their age. For example, as actual health declined with age, if an older person simply compared herself with others her age, then, on average, there should be no deterioration in self reported health.

⁵ Can we believe self-reports on health? I think so. Patterns in self reports of health in addition to life cycle change are consistent with objective data on health. At a given age, younger cohorts are healthier than older (compare, for example, the three cohorts in Figure 1 for which observations around age 50 are available). Also, in each cohort males report better health than females. (Men have higher mortality rates than women because their health problems are more lethal, but women have a considerably higher prevalence than males of less lethal health problems, such as arthritis.) Indeed, self reports of health are not only meaningful, but they apparently contain information on a respondent’s state of health over and above that given by objective data. If, in predicting mortality, self reported health is included along with objective measures of health (whether one has heart disease, diabetes, etc.), self reported health is statistically significant (Idler and Benyamini, 1997; Smith, Taylor, and Sloan, 2001).

and disabling conditions (Tables 1 and 2), and with numerous studies that find significant negative associations between happiness and self reported health with controls for a variety of socioeconomic circumstances (Argyle, 1999, Blanchflower and Oswald, 2003, Frey and Stutzer, 2002ab, Michalos, Zumbo, and Hubley, 2000). The latter studies, which control for income, make clear that the impact of deteriorating health on happiness is due to nonpecuniary effects as well as any loss of income that may come with poor health. The conclusion to which all of these results consistently lead is that adverse health changes have a lasting and negative effect on subjective well-being, and that there is less than complete adaptation to deteriorating health.

2.2 Marital status and happiness

Curiously, despite claims by setpoint theory proponents that life circumstances have virtually no lasting effect on well-being, little evidence on marital formation or dissolution has been advanced supporting this view. The effect of widowhood is perhaps most studied, and the results on this suggest that adverse effects of bereavement on life satisfaction persist, on average, for at least a decade (Frederick and Loewenstein, 1999, p. 312). To my knowledge there is no published study claiming that adaptation to marriage is complete. Indeed, one enthusiastic supporter of the setpoint model makes a specific exception for marriage, without explaining how one reconciles this with setpoint theory (Myers, 1992, compare chaps. 3 and 9).

An as yet unpublished evaluation of the setpoint model, using German longitudinal data to study the effects on well-being of changes in marital status, concludes, contrary to the setpoint model, that “all happiness is not due to temperament” (Lucas et al., 2002, p. 37). The empirical analysis, which focuses on marriage and widowhood, finds, however, a curious asymmetry: there is complete adaptation to marriage, but not (quite) to widowhood. Apparently, whatever is lost

in happiness due to the dissolution of a union by widowhood is not gained by the formation of a union via marriage. There is no analysis of divorce or remarriage. Although the study is presented as a critique of the setpoint model, it is at best a weak one, for it states in its conclusions: “On average people adapt quickly and completely to marriage, and they adapt more slowly to widowhood (though even in this case, adaptation is close to complete after 8 years)” (*ibid.*).

Study of the life cycle experience of cohorts suggests a much stronger departure from the setpoint model. Marriage (and remarriage) have a positive and lasting effect on happiness, and marital dissolution, whether divorce or widowhood, a permanently negative effect. At ages 18-19 when most women and virtually all men have not yet married, their mean happiness is around 2.1 (Figures 2 and 3). Over the next ten years, as up to 50 percent or more of a cohort becomes married, those who are married report happiness levels of around 2.2 to 2.3, while those who have never married remain at about 2.1 (*ibid.*).

These results cannot be due to selection effects. Persons who marry in the first decade of the adult life cycle could not have been happier than others, on average, before they got married. If this were true, then as these persons married and left the never-married group, the average happiness of the remaining never-married would have fallen. In fact, the happiness of those never-married remains constant as more and more persons marry (Figures 2 and 3). As a result, the mean happiness of the cohort as a whole increases as the proportion married increases. One would not observe these happiness patterns for the married and never-married, and for the cohort as a whole, if those with personalities that predisposed them toward greater happiness were

typically the ones getting married.⁶

Beyond age 30 the proportion of a cohort currently married tends to level off and then decline as the effect of marital dissolution due to divorce, separation, and widowhood outweighs that due to the formation of unions through marriage and remarriage. Throughout the adult life cycle, however, there is a marked and persistent gap between the average happiness of those in a cohort who are currently married and those who are not, for both women and men (Figures 4 and 5).

Within the group of married persons, there is little difference in happiness between those who are still in their first marriage and those who are remarried (Table 4). When married respondents are asked specifically about their marital, rather than overall, happiness, it is again true that those who are remarried are, on average, as satisfied with their marriage as those still in their first marriage (Table 5). The noticeably higher average values of marital compared with overall happiness (around 2.5-2.6 versus 2.3) is because a very large proportion (about two-thirds) of respondents choose the “very happy” response when asked specifically about marital happiness, and almost all of the rest choose “pretty happy.”⁷

For those still in their first marriage the average length of marriage ranges from 10 years or less in the youngest cohort, that of 1951-60, to over 35 years in the oldest, that of 1921-30. (Duration of marriage for remarried persons is not available in the GSS data.) The mean level of both overall happiness and marital happiness for these two cohorts is virtually the same despite

⁶ These conclusions come from following a 20-year birth cohort, that of 1953-72, from ages 18-19 through 28-29. The large size of the birth cohort and two-year age spans yield big enough samples of married persons to permit meaningful inferences of their average happiness (except for married males ages 18-19, who are omitted here because the sample size is very small). When the sample is subdivided into two ten-year cohorts, the same pattern is found for each ten-year cohort separately as for the combined cohort, but the variability is greater.

⁷ Blanchflower and Oswald (2003) find that those remarried are significantly less happy than those in their first marriage. This difference from the present results may come from the fact that they do not control for cohort. Younger cohorts are, in general, less happy than older, though not to a great extent. Since a larger number of remarried persons are in younger cohorts, failure to control for the cohort effect may lead to the conclusion that those remarried are less happy than those still in their first marriage.

their much different marriage durations (Tables 4 and 5). Furthermore, the overall happiness of married persons in each of these two cohorts is significantly above that of their counterparts who are not currently married, and significantly above overall happiness at the start of the adult life cycle when very few people are married (Figures 2 and 3). If complete hedonic adaptation to marriage were occurring, it is hard to understand why married persons are persistently happier than others, and why the happiness of those still in their first marriage remains high at increasing durations of marriage.

Just as the formation of marriage affects happiness positively, the dissolution of marriage has a negative effect. Although the mean happiness of those not currently married (that is, persons who are never-married, widowed, and divorced or separated) is significantly below that of their married counterparts, those who have experienced marital dissolution are significantly less happy than those who never married. Never-married persons at later stages of the life cycle report happiness levels around the 2.1 value of the large proportion of never-married persons at the start of the life cycle, but those widowed, divorced, or separated have mean happiness levels of around 2.0 or less (Table 6). One might speculate that personality effects had sorted out those who end up divorced or separated, but there is no significant happiness difference between them and persons who are widowed. The widowed are unlikely to have been selected on the basis of personality, and the fact that their mean happiness and that of the divorced or separated group is virtually the same suggests that one is observing here the effect of marital dissolution on happiness, not personality.

These life cycle results on the association between marital status and happiness are consistent with cross sectional regression analyses of survey data in which controls are introduced for a variety of socio-economic circumstances (Argyle 1999, Blanchflower and

Oswald, 2003, Frey and Stutzer, 2002ab), and with other studies that focus on specific marital circumstances such as divorce and widowhood (Johnson and Wu, 2002, Wortman, Silver, and Kessler, 1993). They are also consistent with a new panel study of divorce that tracks respondents over a five-year period (Waite et al., 2002). The results do not mean that no adaptation occurs after unions are formed or dissolved. But they certainly suggest that adaptation is less than complete, and that the formation of unions has a lasting positive effect on happiness, while dissolution has a permanently negative effect.⁸ If the setpoint model of happiness is correct, it is hard to see how one can reconcile it with the survey evidence on either marriage or health.⁹

3. Is more better?

To turn to economic theory, a basic problem with the revealed preference approach is that the judgment on a person's well-being is made, not by the individual concerned, but by an outsider who is observing the person's consumption choices (Hollander 2001). If one takes the view that the only one who can make authoritative observations on a person's feelings of well-being is the person concerned, then one is led to look at self reports on well-being.

Does the evidence support the view that income and well-being go together? The answer depends on whether one looks at cross sectional or time series data. Support for the hypothesis

⁸ I cannot explain the different results for marriage in the longitudinal analysis by Lucas et al. (2002) discussed in the text, but let me note two possibilities. First, no allowance is made for the possibility that in Germany a fair proportion of couples were cohabiting for some period of time prior to marriage, so one is not really observing the effect on happiness of the formation of unions. Second, although presented as a longitudinal analysis, the study is not actually following the same individuals over time – the number of persons observed at marriage (t) and the years immediately before and after ($t-1$, $t+1$) is considerably greater than those observed two or more years prior to and after marriage ($t-2$, $t+2$, $t-3$, $t+3$, etc.).

⁹ Survey evidence on happiness by race and gender are also difficult to reconcile with the setpoint model. Blacks are consistently less happy than whites; is this because of different setpoints resulting from genetic and personality differences? Also, beyond age 60, the life cycle excess of female over male happiness is reversed; it is hard to explain this without reference to differences by gender in life events (Easterlin 2001b, 2003).

of a positive association comes from point-of-time regressions, which invariably find a significant positive association between income and happiness, with or without controls for other factors (Argyle 1999, Blanchflower and Oswald, 2003, Frey and Stutzer, 2002ab, Graham and Pettinato, 2002). Over the life cycle, however, as income increases and then levels off, happiness remains unchanged, contradicting the inference that income and well-being go together (Figure 6).

If one uses education as a proxy for income, then the life cycle data too reveal the positive cross sectional association between well-being and income. Over the life span those with more education are consistently happier than those with less (Figure 7). What is even more noteworthy, however, is the life cycle *change* in happiness for the more and less educated. If happiness were moving in accordance with the income trajectories of these two educational groups, then the happiness of both groups would increase, with that of the better educated increasing more, and the happiness differential by educational status widening. In fact, happiness remains flat at both educational levels, and the differential unchanged (Figure 7). Although those fortunate enough to start out on the higher income trajectory remain happier throughout the life cycle than those on the lower income trajectory, there is no evidence for either group that happiness increases with income.

These life cycle patterns clearly contradict the expectation based on economic theory that well-being increases with income. But don't they support the setpoint model that has heretofore been called into question? The answer is that they do; indeed, these findings have often been cited by psychologists in support of complete hedonic adaptation. But while there may be (fairly) complete hedonic adaptation with regard to income, this does not mean that there is complete adaptation with regard to all sources of happiness. As has been seen, the evidence on

health and family conditions suggests that adaptation in these areas is less than complete, and that changes in these circumstances have a lasting effect on well-being.

4. Aspirations and adaptation

But why should the extent of adaptation differ with regard to the circumstances, or, as psychologists say, “domain,” under study? The answer, I suggest, is that people’s *aspirations* in each domain respond differently to changes in their circumstances. Complete adaptation implies that aspirations change to the same extent as one’s actual circumstances. This seems to be what happens when income changes. As a result, one gets no nearer to or farther away from the attainment of one’s material aspirations, and well-being is unchanged. Less than complete adaptation means that aspirations change less than the actual change in one’s circumstances. If things change for the better, there is greater goal-fulfillment and well-being increases; if, for the worse, there is a greater shortfall from one’s goals, and well-being declines. This seems to be what happens with regard to marriage and health.

Is there any evidence that the response of aspirations to actual circumstances varies by domain? The answer is yes with regard to the economic and family domains, for which relevant data are available. In what follows, I draw chiefly on nationally representative surveys taken in 1978 and 1994 that include questions on the “good life.” In these surveys the questioning procedure is as follows (see Appendix for the full survey question):

1. We often hear people talk about what they want out of life. Here are a number of different things. [The respondent is handed a card with a list of 24 items.] When you think of the good life – the life you’d like to have, which of the things on this list, if any, are part of that good life as far as you personally are concerned?

2. Now would you go down that list and call off all the things you now have?

The great value of these two questions is that they yield information rarely available – on both aspirations and the attainment of aspirations. The answers to question 1 tell us about desires for certain goods and also for marriage and a family; those to question 2 tell us where the respondents stand in relation to these desires – to what extent they are fulfilled. These responses thus make it possible to follow a cohort’s aspirations and attainments over the sixteen years between 1978 and 1994, and see to what extent aspirations change as a cohort’s actual circumstances change.

Let me start with the responses for ten big-ticket consumer goods that are included on the “good life” list. These goods range from a home, car, and television set to travel abroad, a swimming pool, and a vacation home. Over each stage of the life cycle – early, mid life, and older years -- persons typically acquire more of these big-ticket items (Table 7, lines A-1, B-1, C-1). But their aspirations for these goods -- what they view as part of the good life -- also rises (lines A-2, B-2, C-2). Moreover, the increase in the number of goods desired is, on average, roughly equal in magnitude to that in the average number owned (panel D, column 3).

What is happening is that as people acquire those goods for which aspirations were fairly high to start with (a home, a car, a TV) their aspirations increase for goods which were initially much less likely to be viewed as part of the good life. Thus, in each segment of the life cycle, travel abroad, a swimming pool, and a vacation home are increasingly named as part of the good life, reaching values of nearly 40 percent or more of respondents (Table 8, cols. 1 and 2). The proportion that ever actually has any of these items, however, is typically less than 10 percent (col. 3). There is clearly a suggestion in these data that new material aspirations arise as

previous goals are reached, and, to judge from the mean number of goods desired, to about the same extent.

This inference of complete adaptation in the economic domain is further supported if we divide the cohort by level of education, and consider the two segments of the life cycle in which income is increasing. In each segment the increase in the number of goods owned is greater for those with more education, as one would expect based on their greater income growth (Table 9, panel A). The increase in number of goods desired is also greater for those with more education (panel B). Moreover, for each educational group, the increase in desires is of the same order of magnitude as the increase in the number of goods owned (col. 3, compare line A-1 with B-1, and line A-2 with B-2). Thus, material aspirations are increasing commensurately with material possessions, and the greater the increase in possessions, the greater the increase in desires. It is this differential change in aspirations corresponding to the differential change in income that explains the constancy of happiness over the life cycle for each educational group (Easterlin 2001a).¹⁰

The responses cited so far are for specific goods. Is there evidence suggesting that income aspirations in general rise in proportion to income? The answer is yes. Consider the answers from a different survey that asks people how much income is needed by a family of four to get along. Over a 36-year period “get along” income increases, on average, to the same degree as actual income. This result was obtained by sociologist Lee Rainwater (1994) who

¹⁰ The point-of-time happiness differential is also explained by aspirations (Easterlin 2001a). At the start of the adult life cycle, material aspirations differ very little between the two education groups; hence the better-educated come closer to fulfilling their aspirations, and are happier. Subsequently, aspirations rise more for the better-educated, but at any point in time the dispersion in aspirations continues to be less than that in income, and the happiness differential by education persists.

concluded that the elasticity of “get along” to actual income is one.¹¹

Responses to another item on the good life list – whether people consider a lot of money as part of the good life – also suggest that income aspirations increase in proportion to income, or at least, roughly so. In the sixteen-year span covered by the good life data, cohort real per capita income increased by 27 percent in the early years of the adult life cycle and 22 percent in the middle years. One might expect that because of this growth of income, the proportion of a cohort that says it has “a lot of money” would increase somewhat. There is, in fact, an increase, but it amounts to only a few percentage points (Table 10). The striking feature of the responses is that throughout the life cycle hardly anyone – never more than 7 persons in 100 – thinks he or she has a lot of money.

Let me turn from the economic to the family domain. The desire for a happy marriage is a common one; at every point in the life cycle, three-quarters or more of respondents say that a happy marriage is part of the good life (Table 11, lines A-1, B-1, C-1). The proportion that actually has a happy marriage increases in the early life cycle, and declines thereafter as divorce, separation, and widowhood take their toll (lines A-2, B-2, C-2). There is a shortfall of actual circumstances relative to aspirations for a happy marriage among a fifth or more of the population throughout the life cycle.

If adaptation were complete, then one would expect that married persons who are not in a happy marriage would abandon their desires for such a marriage. Similarly, if divorced,

¹¹ A much earlier analysis of “get-along” income based on responses for only a 14-year period, 1957 to 1971, found an income elasticity of 0.6 (Kilpatrick 1973). Pioneering theoretical and empirical work relating variations in income norms to actual income has been done by the Leyden School, founded by Bernard van Praag (van Praag, 1968, van Praag and Frijters, 1999). Additional support for Rainwater’s conclusion comes from a study by members of this school (van de Stadt, Kapteyn, and van de Geer, 1985, Kapteyn, 2002). Using panel data and a model taking account of both habit formation and interdependent preferences, this study finds an elasticity of the income norm on actual income equal to one.

separated or widowed persons revised their marriage aspirations to accord with their changed marital status, they too should give up their aspirations for a happy marriage.

In fact, aspirations for a happy marriage persist among more than half of those respondents who do not, in fact, have a happy marriage (Table 12, column 1). Even among persons for whom the prospect of remarriage is quite low – divorced, separated or widowed persons ages 45 and over -- marriage aspirations continue to be above 50 percent (column 3). Among persons who have been *single* their entire lives and are ages 45 and over, more than four in ten cite a happy marriage as part of the good life as far as they personally are concerned (*ibid.*). It is true that among all of these groups aspirations for a happy marriage are below the average for the whole population. But if those who have been single for more than 30 years had adjusted their marital aspirations to accord with their actual status, one would hardly expect more than four in ten to cite a happy marriage as part of the good life as far as they *personally* are concerned. Similarly, if aspirations eventually adjusted to actual circumstances, one would hardly expect that more than half of widows and divorcees 45 years and older would still say that they view a happy marriage as part of the good life. Thus, in contrast to the economic domain, hedonic adaptation seems to be occurring only to a limited extent with regard to marriage circumstances. The substantial persistence of aspirations for a happy marriage among those widowed, divorced, separated, and never-married explains, I believe, why these groups are less happy, on average, than married persons, among whom aspirations for a happy marriage are more nearly fulfilled.

What about aspirations for children? Economists like to draw an analogy between the demand for children and the demand for consumer durables. We have seen that as more big-ticket consumer goods are acquired, desires for such goods tend to grow to about the same

extent. Is this true of children – as people have more children, do their family size desires increase commensurately? The answer is no. At all stages of the life cycle the number of children desired is virtually constant, whether measured by the percentage of adults who want children or the average number of children wanted (Table 13, line 1 in panels A, B, C).

Although actual family size changes, especially in the early life cycle (line 2), family size aspirations change hardly at all.

Is it possible that aspirations for the “quality”, if not quantity, of children increase over the life cycle? Perhaps, but there is not much sign of increasing aspirations for a highly expensive dimension of child quality, a college education for one’s children. The proportion who consider such an education to be part of the good life rises mildly in the early life cycle, from 56 to 65 percent, thereafter, it changes very little (Table 14, cols. 1, 2). While income growth over the life cycle is accompanied by persistent growth in aspirations for big ticket consumer goods, income growth is seemingly not associated with growth in desires for either the number or quality of children.

I have no data on health aspirations. If such data were available, however, I suspect that “good health” would be checked off as part of the good life, irrespective of age.¹² Since self reported health declines with age, this would imply that adaptation to actual health circumstances is less than complete over the life cycle. I think there is evidence too of less than complete adaptation in regard to other life circumstances such as friendship, loss of a job, and retirement (Clark and Oswald, 1994, Easterlin 2003, Gallie and Russell, 1998, Myers, 1999, Oswald, 1997, Winkelman and Winkelman, 1998).

¹² I added “good health” to the end of the good life list and ran the survey in an undergraduate class and faculty seminar (n=50). Good health is checked as part of the good life by every single respondent.

5. Building a better theory of well-being

We can now begin to see the outlines of a better theory of happiness. Let us start with the economist's notion that the typical individual has a utility or happiness function such that well-being depends on a variety of pecuniary and nonpecuniary conditions, or domains. To judge from unconstrained self reports, the domain that is typically of most importance is material living level; this is followed by family concerns and health, and then, work and personal character concerns such as emotional stability and self-discipline (Figure 8). The importance of living level and family concerns does not change with life cycle stage, but health concerns become higher at older age, and job concerns, lower (*ibid.*, Crimmins and Easterlin, 2000).

The typical person is taken to have certain goals or aspirations in each domain (such as a home of one's own, a car, a happy marriage, two children, good health, etc.) and a current state of attainment in each domain (a rented apartment, a spouse and child, and so on). The overall happiness of the individual depends on the shortfall between aspirations and attainments in each domain, and the relative importance of each domain in the individual's utility function.

Economic analysis typically assumes that well-being depends only on attainments in each domain, but there are two strands of theory – habit formation and interdependent preferences – that recognize the effect on well-being of aspirations. Habit formation stresses that the utility one derives from a given set of goods is affected by comparisons with one's past experience. Interdependent preferences points out that the utility created by one's having a given amount of a good depends partly on the amount of that good that others have. The counterpart in psychology of the economists' concept of habit formation is hedonic adaptation, and of interdependent preferences, social comparison. I use the psychologists' terms in what follows, because these are more common in the happiness literature.

The central point of the present theory of happiness is that neither hedonic adaptation nor social comparison operate equally across all domains or constituents of domains. Hedonic adaptation, as we have seen, is less complete with regard to family circumstances and health than in the material goods domain. I suggest that social comparison is also less in family life and health than in the material goods domain, because these domains are less accessible to public scrutiny than material possessions. (Recall that in Table 2 life satisfaction is less if one's disability is more likely to be noticed by persons who know the respondent fairly well.)

Moreover, hedonic adaptation and social comparison do not operate equally with regard to all constituents of a given domain. With regard to the goods domain, Scitovsky (1976) has argued that cultural goods, such as music, literature, and art, are less subject to hedonic adaptation than "comfort" goods, like homes and cars. Similarly, the distinction drawn between positional and nonpositional goods by Frank (1985), Hirsch (1976), Ng (1978), and others is an example of a classification of goods based on whether or not their utility is affected by social comparison.

Each individual has only a given amount of time to allocate among different domains and their constituents. Clearly, the happiness of an individual can be increased by allocating his or her time to those domains and constituents of domains in which hedonic adaptation and social comparison are less important. Based on the evidence above, this implies that happiness would be increased by greater attention to family life and health rather than economic gain, and, within the economic sphere, to nonpositional and cultural goods. With regard to macroeconomic policy, reducing unemployment and inflation increases happiness, but the pursuit of rapid economic growth as a policy objective is questionable.

Do individuals currently achieve the optimal allocation of time among domains? My answer is no; people are likely to allocate a disproportionate amount of time to the pursuit of pecuniary rather than nonpecuniary objectives, as well as to “comfort” and positional goods, and to shortchange goals that will have a more lasting effect on well-being (cf. also Frank 1997). This misallocation occurs because in making decisions about how to use their time, individuals take their aspirations as fixed at their present levels, and fail to recognize that aspirations may change because of hedonic adaptation and social comparison. In particular, people make decisions assuming that more income, comfort, and positional goods will make them happier, failing to recognize that hedonic adaptation and social comparison will come into play, raise their aspirations to about the same extent as their actual economic gains, and leave them feeling no happier than before. As a result, most individuals spend a disproportionate amount of time working, and sacrifice family life and health, domains in which aspirations remain fairly constant as actual circumstances change, and where the attainment of one’s goals has a more lasting impact on happiness.

What about the interdependence between pecuniary and nonpecuniary pursuits – doesn’t more money make the attainment of family and health goals easier? The answer is no, because the causal effects on nonpecuniary goals of pecuniary success are negative as well as positive. More income may contribute to a more comfortable family life, and may facilitate health through exercise machines and recreational expenditures. But time spent in the pursuit of income takes away from the time available for family, exercise, and recreation. Moreover, the net balance of effects tends to be negative. This is because of the inability of people to foresee the differential change in aspirations by domain. This failure to anticipate the change in aspirations assures that the allocation of time to the pecuniary domain will be excessive and that the more rewarding

domains of family and health will consequently receive insufficient attention. In family life, the result is a substitution of goods for time spent with one's spouse and children.¹³

One may ask if social learning occurs – don't people eventually realize how their material aspirations escalate with economic achievement, and become aware of the self-defeating nature of the pursuit of pecuniary goals? Perhaps, but the evidence on material aspirations that I have given fails to show evidence of such social learning. Moreover, the change in material aspirations itself works against social learning. When asked how happy they were five years ago, people, on average, systematically underestimate their well-being at that time, because they evaluate their past situation in terms, not of the lower material aspirations they actually had at that time, but on the basis of the new higher level of aspirations they have now acquired (Easterlin 2001a, 2002). As a result, they tend to think they are better off than they were in the past, rather than realizing that there has been no net improvement.

Some economists might seize on this misperception of past happiness to argue that if people *think* they are better off than they used to be, why should one care about their misallocation of time? What does it matter if the evidence is that they are really no happier than they used to be, as long as they think that they are? To say the least, this is a strange argument to be made by economists, who have long argued against the “money illusion” due to price level change; the present theory is simply adding a “real income illusion” due to changing material aspirations. Beyond this, however, the misperception has major societal consequences, because the illusion of greater happiness than in the past condemns us to the pursuit of unending economic growth (Easterlin, 1996, chapter 10; 2004 forthcoming).

¹³ The change in childrearing attitudes is indicative of this substitution (Crimmins et al., 1991, pp. 125-126).

6. Summary

My interest here is in developing a theory to explain people's feelings of well-being as reported in social surveys. To judge from responses to open-ended questions, both pecuniary and nonpecuniary circumstances (domains) affect well-being. The most important factor is pecuniary, one's material living level. Next, and about equal in importance, are two nonpecuniary factors, family life and health. After this come job circumstances (work utility) and considerations having to do with personal character. Each individual has certain goals (or aspirations) in each domain. One's overall well-being depends on the extent to which the various goals are fulfilled, and the relative importance of the domains in one's utility function.

Mainstream economic theory sets aside goals or aspirations. It focuses chiefly on pecuniary conditions and assumes that an increase in the material goods at one's disposal increases well-being. The implicit assumption is that the utility associated with a given set of consumption goods is unaffected by one's past experience or what others have, that is, that habit formation and interdependent preferences play no part in determining the utility attributed to a given consumption set, and hence one's feelings of well-being.

A better theory of well-being – one more consistent with the evidence – sets aside this assumption. It recognizes that one's feelings about any given set of circumstances depend partly on one's history, and partly on comparison with the situation of others. The evidence suggests that these influences are especially important with regard to material living level. The satisfaction anticipated *ex ante* from a given increase in consumption turns out *ex post* to be less than expected, as one adapts to the new level of living, and as the living levels of others improve correspondingly. Improvements in material circumstances are found to yield little change in

well-being over the life cycle, because material aspirations change commensurately with actual circumstances.

In the nonpecuniary domain of family life, however, the evidence indicates that aspirations do not change to the same extent as actual circumstances. The attainment of family life goals does not lead to further escalation of these goals, and, as a result, subjective well-being is permanently increased. Failure to attain such goals has a lasting negative effect on feelings of well-being. With regard to health, too, it seems likely that aspirations do not simply mirror the change in one's actual condition, that is, that one merely downgrades one's notion of good health as actual health declines. Because the conception of and desires for good health remain fairly constant, the increasing shortfall of actual relative to desired health over the life course reduces feelings of well-being. Attempts to reduce this shortfall by more exercise and changes in life style would moderate the decline in well-being.

People fail to perceive that because of hedonic adaptation and social comparison aspirations in the pecuniary domain will change commensurately with actual circumstances. As a result, a disproportionate amount of time is devoted to the pursuit of pecuniary goals at the expense of family life and health, and subjective well-being is less than it might be. Clearly, a reallocation of time in favor of family life and health would increase subjective well-being.

Because mainstream economic theory views individual preferences as given and sacrosanct, economic policy proposals are typically confined to manipulation of the socio-economic context. Viewed in terms of the present analysis, some of these policies, such as measures to improve health or maintain full employment, are consistent with greater well-being. Beyond this, however, the assumption that preferences are beyond the realm of policy is called into doubt, once the role in shaping preferences of hedonic adaptation and social comparison is

recognized. It is hard to see how individuals who are unaware of some of the forces shaping their behavior can be expected to make choices in the allocation of their time that will successfully maximize their subjective well-being. It is time to recognize that serious policy attention is needed to education as a vehicle for shaping more informed preferences (cf. Scitovsky, 1976, Layard, 1980).

In closing, let me touch on a few research needs to build a better theory of well-being, beyond those in economics and sociology, already apparent from the many gaps in this paper. In psychology, as has been seen, the recent literature has emphasized the role of genetic and personality factors in determining well-being, a view that carried to the extreme, as in the setpoint model, leaves little or no room for individual and collective action to improve well-being. Social survey evidence of the type I have cited contradicts the setpoint model. But this is not to say that genetic and personality factors do not influence well-being. They clearly do, and one promising line of research is to explore the interplay between personality and life events in shaping well-being (cf. McCrae and Costa, 1990, chapter 9).

There is need too for incorporating internal biological mechanisms in a better theory of well-being. The importance to well-being of family life in this analysis may be seen as a proxy for the effects of a broader network of social support that extends to friends, community and religious organizations, and the like. There is ample biological evidence that social support promotes physical health, while social isolation is detrimental (Berkman and Glass, 2000). Similarly, an inverse association between symptoms of stress and position in the social hierarchy has been established in both humans and animals (Seeman and Crimmins, 2001). One suspects that a fair share of the research on the association between social conditions, biological

mechanisms, and physical health could be usefully applied to develop a more comprehensive theory of subjective well-being that includes underlying biological mechanisms.

There is, finally, the question of why the adjustment of aspirations to actual circumstances differs by domain, a question that suggests the need for research in evolutionary psychology. It is possible that the differences among domains may be due to evolutionary influences (cf. Frederick and Loewenstein, 1999, p. 314). The persistence of aspirations for a happy marriage among those who are in broken unions may reflect the importance to group survival of mating and reproduction. Correspondingly, the disproportionate importance of adaptation in the economic domain may be because those whose material aspirations were never satisfied were more likely to survive, and, as a result, we have inherited their genes (Buss 1996, Kasser 2002). If so, we are paying the price today in happiness foregone of our forebears' survival success.

References

- Argyle, M. 1999. "Causes and Correlates of Happiness," in D. Kahneman, E. Diener, and N. Schwarz eds., Well-Being: The Foundations of Hedonic Psychology, New York: Russell Sage Foundation, 353-73.
- Berkman, Lisa F. and Thomas Glass, 2000. "Social Integration, Social Networks, Social Support, and Health," in Lisa F. Berkman and Ichiro Kawachi, eds., Social Epidemiology, Oxford: Oxford University Press, 137-173.
- Blanchflower, D.G. and A.J. Oswald, 2003. "Wellbeing over Time in Britain and the USA," Journal of Public Economics, forthcoming.
- Brickman, Philip, Dan Coates, and Ronnie Janoff-Bulman, 1978. "Lottery Winners and Accident Victims: Is Happiness Relative?" Journal of Personality and Social Psychology, 36:8, 917-927.
- Buss, D.M., 1996. "The Evolutionary Psychology of Human Strategies," in E.T. Higgins and A.W. Kruglanski, eds., Social Psychology: Handbook of Basic Principles. New York: Guilford Press, 3-38.
- Cantril, H., 1965. The Pattern of Human Concerns. New Brunswick, N.J.: Rutgers University Press.
- Clark, A.E. and A.J. Oswald, 1994. "Unhappiness and Unemployment," Economic Journal, 104, 648-659.
- Costa, Paul T. Jr., Alan B. Zonderman, Robert R. McCrae, Joan Cornoni-Huntley, Ben Z. Locke, and Helen E. Barbano, 1987. "Longitudinal Analyses of Psychological Well-Being in a National Sample: Stability of Mean Levels," Journal of Gerontology, 42:1, 50-55.

Crimmins, Eileen M. and Richard A. Easterlin, 2000. "What Goals Motivate Individual Behavior?" in K. Warner Schaie and John Hendricks (eds.), The Evolution of the Aging Self. New York: Springer Publishing Company, 159-168.

Crimmins, Eileen M., Richard A. Easterlin, and Yasuhiko Saito, 1991. "Preference Changes among American Youth: Family, Work, and Goods Aspirations, 1976-86," Population and Development Review, 17:1 (March), 115-133.

Cummins, Robert A., Richard Eckersley, Julie Pallant, Jackie van Vugt, and Rose Anne Misajon, 2003. "Developing a National Index of Subjective Well-Being: The Australian Unity Well-Being Index," Social Indicators Research, forthcoming.

Diener, Ed, 1984. "Subjective Well-Being," Psychological Bulletin, 95:3, 542-575.

Diener, Ed, and Richard E. Lucas, 1999. "Personality and Subjective Well-Being," in Daniel Kahneman, Ed Diener, and Norbert Schwarz (eds.), Well-Being: The Foundations of Hedonic Psychology, New York: Russell Sage Foundation, 213-229.

Easterlin, Richard A., 1996. Growth Triumphant: The Twenty-first Century in Historical Perspective, Ann Arbor, MI: University of Michigan Press.

Easterlin, Richard A., 2001a. "Income and Happiness: Towards a Unified Theory," The Economic Journal, 111:473 (July), 465-484.

Easterlin, Richard A., 2001b. "Life Cycle Welfare: Trends and Differences," Journal of Happiness Studies 2, 1-12.

Easterlin, Richard A., 2002. "Is Reported Happiness Five Years Ago Comparable to Present Happiness? A Cautionary Note," Journal of Happiness Studies, 3, 193-198.

Easterlin, Richard A., 2003. "Happiness of Women and Men in Later Life: Nature, Determinants, and Prospects," in M. Joseph Sirgy, Don Rahtz, and Josh Samli, eds., Advances in Quality of Life Research, Kluwer, forthcoming.

Easterlin, Richard A., 2004. "Is Economic Growth Creating a New Postmaterialistic Society," in Richard A. Easterlin, The Reluctant Economist: Perspectives on Economics, Economic History, and Demography, New York: Cambridge University Press, chapter 3, forthcoming.

Frank, Robert H., 1985. "The Demand for Unobservable and Other Nonpositional Goods," American Economic Review, 75 (March), 279-301.

Frank, Robert H., 1997. "The Frame of Reference as a Public Good," The Economic Journal 107 (November), 1832-1847.

Frederick, Shane and George Loewenstein, 1999. "Hedonic Adaptation" in Daniel Kahneman, Ed Diener, and Norbert Schwarz, eds., Well-Being: The Foundations of Hedonic Psychology. New York: Russell Sage, 302-329.

Frey, Bruno S. and Alois Stutzer, 2002a. Happiness and Economics: How the Economy and Institutions Affect Well-Being. Princeton: Princeton University Press.

Frey, Bruno S. and Alois Stutzer, 2002b. "What Can Economists Learn from Happiness Research?" Journal of Economic Literature, XL (2, June), 402-435.

Gallie, D. and H. Russell, 1998. "Unemployment and Life Satisfaction: A Cross-Cultural Comparison," Archives Europeennes de Sociologie, XXXIX:2, 248-280.

Graham, Carol and Stefano Pettinato, 2002. Happiness and Hardship: Opportunity and Insecurity in New Market Economies. Washington, D.C.: Brookings Institution Press.

Hirsch, F., 1976. Social Limits to Growth. Cambridge, MA: Harvard University Press.

Hollander, Heinz, 2001. "On the Validity of Utility Statements: Standard Theory Versus Duesenberry's," Journal of Economic Behavior and Organization 45 (3 July), 227-249.

Idler, Ellen L. and Yael Banyamini, 1997. "Self-Rated Health and Mortality: A Review of Twenty-Seven Community Studies," Journal of Health and Social Behavior, 38:1 (March), 21-37.

Johnson, D.R. and J. Wu, 2002. "An Empirical Test of Crisis, Social Selection, and Role Explanations of the Relationship between Marital Disruption and Psychological Distress," Journal of Marriage and the Family, 64 (February), 211-224.

Kahneman, Daniel, Ed Diener, and Norbert Schwarz, eds., 1999. Well-Being: The Foundations of Hedonic Psychology. New York: Russell Sage.

Kammann, R., 1983. "Objective Circumstances, Life Satisfaction, and Sense of Well-Being: Circumstances Across Time and Place," New Zealand Journal of Psychology, 12, 14-22.

Kapteyn, Arie, 2002. "Relative Utility and Income Growth: An Example," in Richard A. Easterlin, ed., Happiness in Economics, Northampton, MA: Edward Elgar, 143-145.

Kasser, Tim, 2002. The High Price of Materialism. Cambridge, MA: MIT Press.

Kilpatrick, Robert W., 1973. "The Income Elasticity of the Poverty Line," Review of Economics and Statistics, LV:3 (August), 327-332.

Layard, R., 1980. "Human Satisfaction and Public Policy," Economic Journal, 90 (December), 737-750.

Lucas, Richard E., Andrew E. Clark, Yannis Georgellis, and Ed Diener, 2002. "Re-Examining Adaptation and the Setpoint Model of Happiness: Reactions to Changes in Marital Status." Journal of Personality and Social Psychology, forthcoming.

Lykken, David and Auke Tellegen, 1996. "Happiness is a Stochastic Phenomenon," Psychological Science, 7:3 (May), 180-189.

Mehnert, Thomas, Herbert H. Kraus, Rosemary Nadler, and Mary Boyd, 1990. "Correlates of Life Satisfaction in Those with Disabling Conditions," Rehabilitation Psychology, 35:1, 3-17.

Michalos, A.C., B.D. Zumbo, and A. Hubley, 2000. "Health and the Quality of Life," Social Indicators Research, 51, 245-286.

Myers, David G., 1992. The Pursuit of Happiness. New York: Avon.

Myers, David G., 1999. "Close Relationships and Quality of Life," in Daniel Kahneman, Ed Diener, and Norbert Schwarz, eds., Well-Being: The Foundations of Hedonic Psychology, New York: Russell Sage.

National Opinion Research Center, 1999. General Social Surveys, 1972-1998: Cumulative Codebook. Chicago: National Opinion Research Center.

Ng, Yew-Kwang, 1978. "Economic Growth and Social Welfare: The Need for a Complete Study of Happiness," Kyklos, 31:4, 575-87.

Oswald, Andrew J., 1997. "Happiness and Economic Performance," Economic Journal, 107:445 (November), 1815-31.

Pigou, A.C., 1932. The Economics of Welfare, London: Macmillan.

Rainwater, Lee, 1994. "Family Equivalence as a Social Construction," in D. Ekert-Jaffe, ed., Standards of Living and Families: Observation and Analysis, Montrouge, France: John Libbey Eurotext, pp. 25-39.

Roper-Starch Organization, 1979. Roper Reports 79-1. Storrs, CT: University of Connecticut, The Roper Center.

Roper-Starch Organization, 1995. Roper Reports 95-1. Storrs: CT: University of Connecticut, The Roper Center.

Scitovsky, Tibor, 1976. The Joyless Economy, Oxford: Oxford University Press.

Seeman, Teresa E. and Eileen Crimmins, 2001. "Social Environment Effects on Health and Aging: Integrating Epidemiologic and Demographic Approaches and Perspectives," in Maxine Weinstein, Albert I. Hermalin, and Michael A. Stoto, eds., Population Health and Aging: Strengthening the Dialogue between Epidemiology and Demography, Annals of the New York Academy of Sciences, Vol. 954, New York: The New York Academy of Sciences, 88-117.

Smith, V. Kerry, Donald H. Taylor, Jr., and Frank A. Sloan, 2001. "Longevity Expectations and Death: Can People Predict their Own Demise?" American Economic Review 91:4 (September), 1126-1134.

Van Praag, Bernard, 1968. Welfare Functions and Consumer Behavior: A Theory of Rational Irrationality. Amsterdam: North Holland.

Van Praag, Bernard M.S. and Paul Frijters, 1999. "The Measurement of Welfare and Well-Being: The Leyden Approach," in Daniel Kahneman, Ed Diener and Norbert Schwarz (eds.), Well-being: The Foundations of Hedonic Psychology, New York: Russell Sage Foundation, 413-33.

Van de Stadt, Huib, Arie Kapteyn and Sara van de Geer, 1985. "The Relativity of Utility: Evidence from Panel Data," Review of Economics and Statistics, 67:2 (May), 179-87.

Veenhoven, Ruut, 1993. Happiness in Nations, Subjective Appreciation of Life in 56 Nations 1946-1992, Rotterdam, Netherlands: Erasmus University.

Waite, Linda J., Don Browning, William J. Doherty, Maggie Gallagher, Ye Luo, and Scott M. Stanley, 2002. Does Divorce Make People Happy? Findings from a Study of Unhappy Marriages. New York: Institute for American Values.

Winkelman, L. and R. Winkelman, 1998. "Why Are the Unemployed So Unhappy? Evidence from Panel Data," Economica, 65, 1-15.

Wortman, C.B., R.C. Silver, and R.C. Kessler, 1993. "The Meaning of Loss and Adjustment to Bereavement," in M.S. Stroebe, W. Stroebe, and R.O. Hansson, eds., Handbook of Bereavement: Theory, Research, and Intervention, New York: Cambridge University Press, 349-366.

Appendix
Good Life Questions from Roper Surveys 79-1, 95-1

77. We often hear people talk about what they want out of life. Here are a number of different things. (HAND RESPONDENT CARD) When you think of the good life – the life you'd like to have, which of the things on this list, if any, are part of that good life as far as you personally are concerned?
78. Now would you go down that list and call off all the things you now have? Just call off the letter of the items. (RECORD BELOW)

	77. PART OF THE GOOD LIFE	78. NOW HAVE
a. A home you own.....		
b. A yard and lawn.....		
c. A car.....		
d. A second car.....		
e. A vacation home.....		
f. A swimming pool.....		
g. A happy marriage.....		
h. No children.....		
i. One child.....		
j. Two children.....		
k. Three children.....		
l. Four or more children.....		
m. A job that pays much more than average.....		
n. A job that is interesting.....		
o. A job that contributes to the welfare of society....		
p. A college education for myself.....		
q. A college education for my children.....		
r. Travel abroad.....		
s. A color TV set.....		
t. A second color TV set.....		
u. A five day work week.....		
v. A four day work week.....		
w. Really nice clothes.....		
x. A lot of money.....		

Table 1
 Percent Distribution by Life Satisfaction
 of Persons by Self-Reported Disability Status, 1986

Disability status	(1)	(2)	(3)	(4)	(5)	(6)
	Life Satisfaction					n
	<u>Satisfied</u>			<u>Dissatisfied</u>		
	Very	Somewhat	Neither	Somewhat	Very	
Nondisabled	50	40	4	5	1	1064
Disabled	37	31	5	18	9	675

Source: Mehnert, Krauss, Nadler, and Boyd, 1990, p. 13. The question is, “How satisfied are you with life in general – very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied, or very dissatisfied?” Respondents who were not sure or refused (2 percent or less) are classified with “neither.”

Table 2
Percent Distribution by Life Satisfaction of Persons with Self-Reported Disability,
by Characteristic of Disabling Condition, 1986

	(1)	(2)	(3)	(4)
	Life satisfaction			n
	Very or somewhat satisfied	Neither	Somewhat or very dissatisfied	
All persons with disability	68	5	27	675
1. <u>Severity</u>				
Slight	86	2	12	108
Moderate	80	6	14	216
Somewhat severe	61	5	34	196
Very severe	49	6	45	155
2. <u>Multiple conditions</u>				
No	74	2	24	493
Yes	57	5	38	182
3. <u>Type of disability</u>				
Sensory	86	1	13	88
Mental ^a	72	5	23	61
Physical	68	3	29	303
Other serious health	65	5	30	196
4. <u>Limitation of activities</u>				
None	91	0	9	61
Limited in amount, kind of work ^b	75	6	19	317
Cannot work, keep house, etc.	56	6	38	297
5. <u>Feels close others^c perceive respondent disabled</u>				
No	78	^d	22 ^d	371
Yes	58	^d	42 ^d	304

a. Mental retardation, developmental, mental illness.

b. Includes "other activities limited."

c. Persons who know respondent fairly well.

d. "Neither" included with "somewhat or very dissatisfied."

Source: Mehnert, Krauss, Nadler, and Boyd, 1990, pp. 10, 12.

Figure 1
Mean Self Reported Health , Cohorts of 1911-20 to 1951-60, by Age
(five Year average centered at each age)

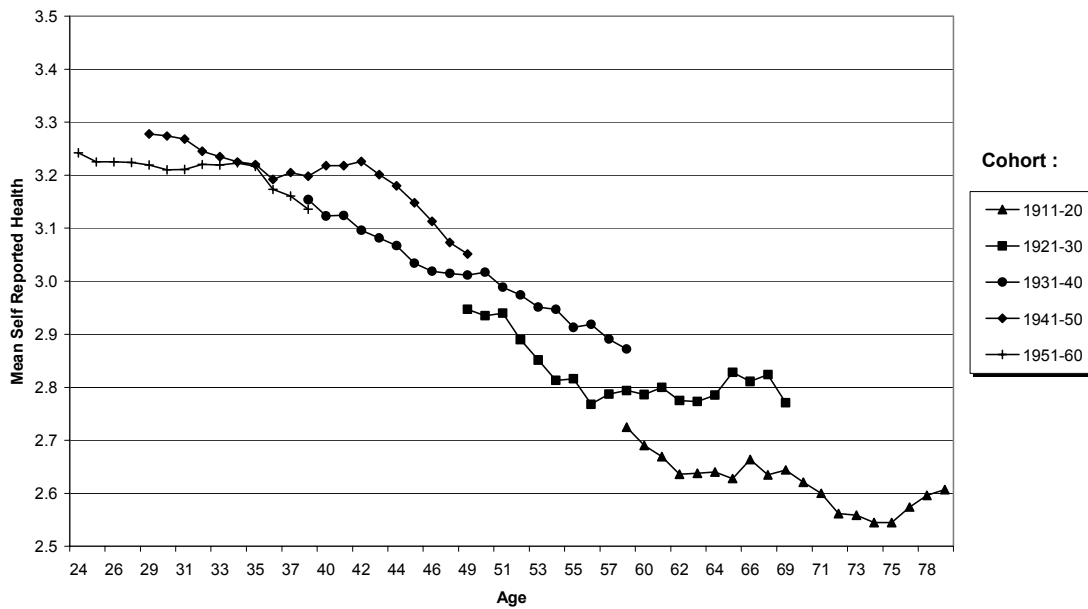


Table 3
 Mean Happiness by Self Reported Health Status,
 Birth Cohorts of 1911-20 to 1951-60, 1972-2000

(1) Birth cohort	(2) Stage of life cycle	(3) (4) (5) (6) Mean happiness			
		Excellent health	Good health	Fair health	Poor health
1951-60	Ages 23 to 45	2.36	2.12	1.85	1.63
1941-50	Ages 27 to 55	2.37	2.17	1.92	1.74
1931-40	Ages 37 to 65	2.43	2.23	1.98	1.74
1921-30	Ages 47 to 75	2.48	2.24	2.06	1.83
1911-20	Ages 57 to 85	2.52	2.27	2.12	1.96

Source: Unless otherwise indicated, the source for all tables and figures is the United States General Social Survey, 1972-2000 (cf. National Opinion Research Center, 1999).

Figure 2
Mean Happiness of Females by Marital Status, Cohort of 1953-72 from Ages 18-19 to 28-29

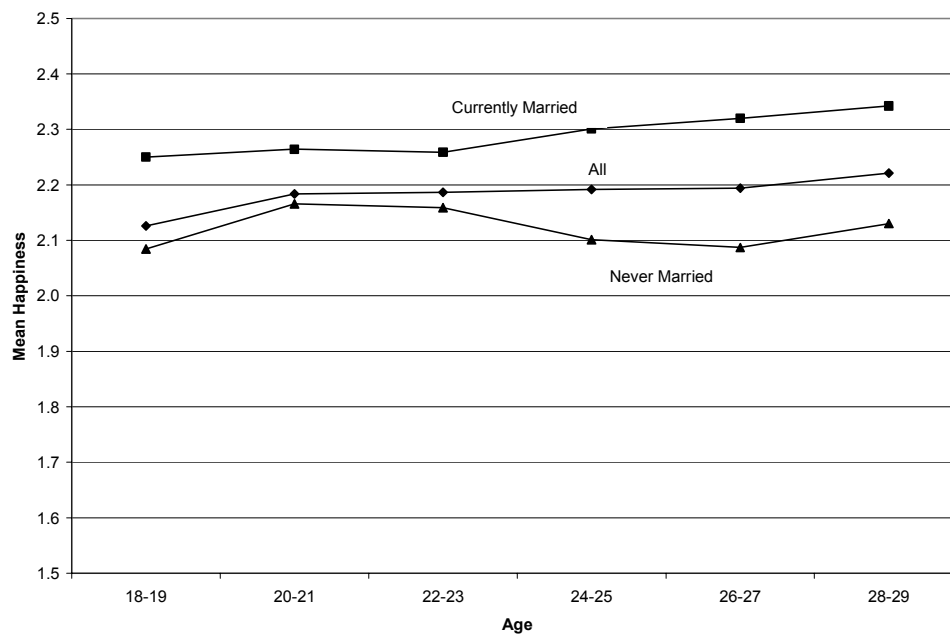


Figure 3
Mean Happiness of Males by Marital Status, Cohort of 1953-72 from Ages 18-19 to 28-29

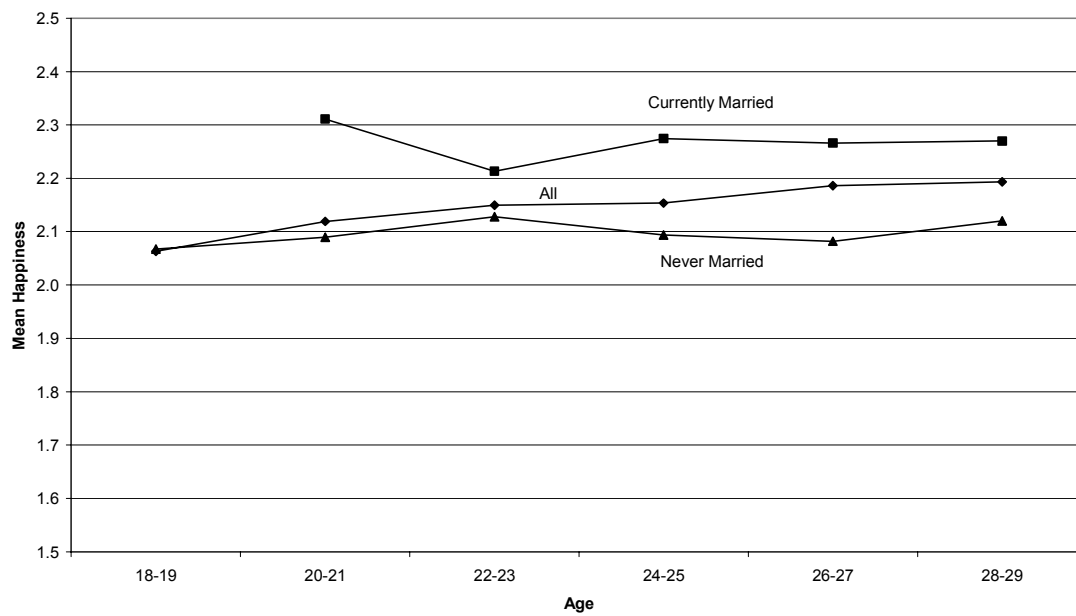


Figure 4
Mean Happiness of Currently Married and Unmarried Females in Specified Cohort, by Age
(five year average centered at each age)

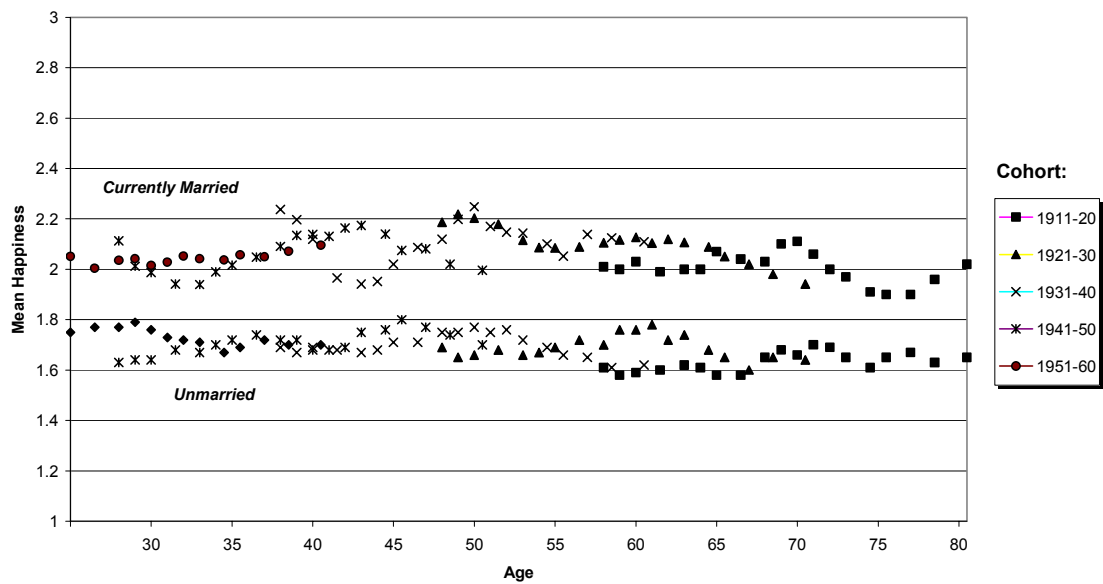


Figure 5
Mean Happiness of Currently Married and Unmarried Males in Specified Cohort, by Age
 (five year average centered at each age)

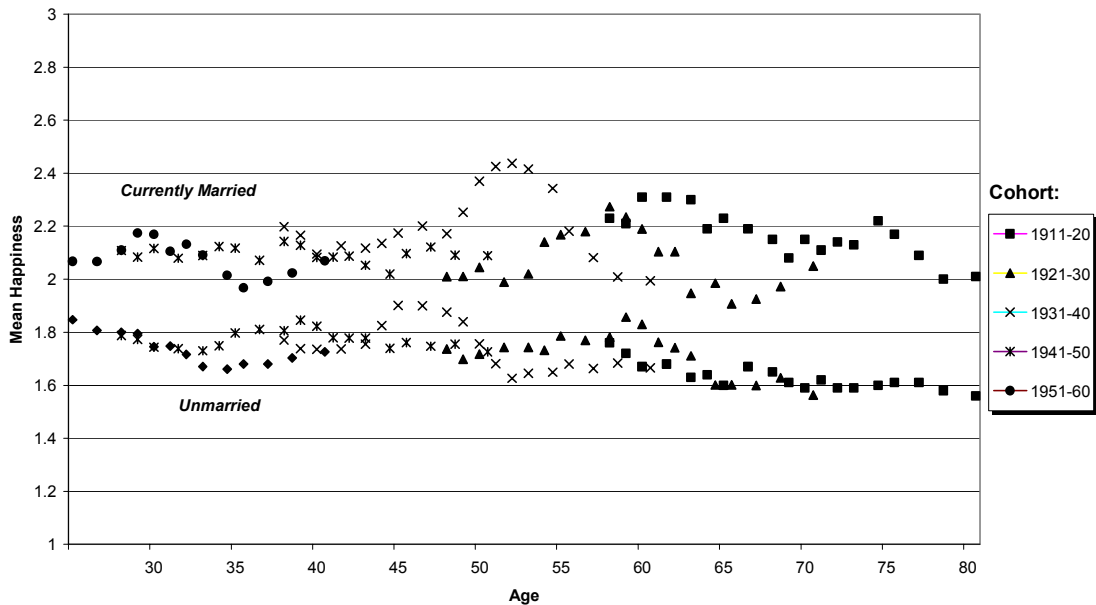


Table 4
Mean Happiness of Currently Married Women by Number of Times Married,
Birth Cohorts of 1921-30 to 1951-60, 1972-2000

(1)	(2)	(3)	(4)
Birth cohort	Stage of life cycle	<u>Mean happiness</u>	
		First marriage	Second or later
1951-60	Ages 23 to 45	2.31	2.27
1941-50	Ages 27 to 55	2.35	2.32
1931-40	Ages 37 to 65	2.36	2.32
1921-30	Ages 47 to 75	2.36	2.28

Table 5
Mean Marital Happiness^a of Currently Married Women
by Number of Times Married,
Birth Cohorts of 1921-30 to 1951-60, 1972-2000

(1)	(2)	(3)
Birth cohort	<u>Mean marital happiness</u>	
	First marriage	Second or later
1951-60	2.58	2.54
1941-50	2.57	2.58
1931-40	2.58	2.51
1921-30	2.60	2.50

- a. The question asked, with assigned numerical value in brackets, is: “Taking things altogether, how would you describe your marriage? Would you say that your marriage is very happy [=3], pretty happy [=2], or not too happy [=1]?”

Table 6
 Mean Happiness of Women Not Currently Married By Marital Status,
 Birth Cohorts of 1921-30 to 1951-60, 1972-2000

(1)	(2)	(3)	(4)	(5)
Birth cohort	Stage of life cycle	<u>Mean happiness</u>		
		Widowed	Divorced or separated	Never married
1951-60	Ages 23 to 45	1.98	1.96	2.07
1941-50	Ages 27 to 55	1.95	2.01	2.05
1931-40	Ages 37 to 65	2.00	1.97	2.11
1921-30	Ages 47 to 75	1.97	2.00	2.15

Figure 6. Happiness and Income over the Life Cycle

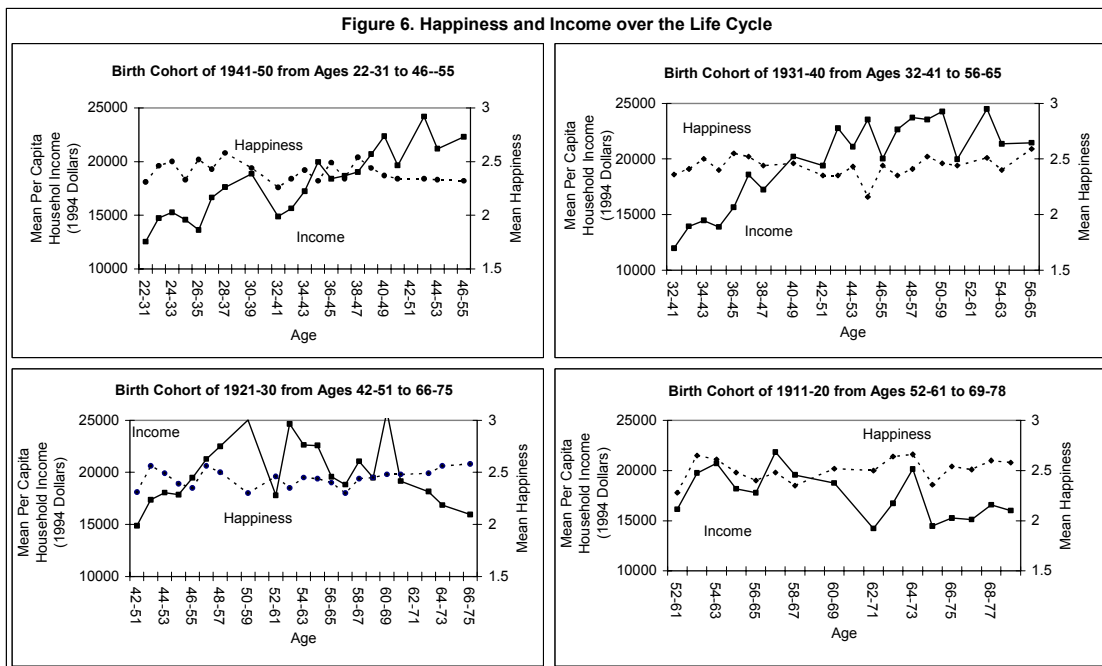


Figure 7. Life Cycle Happiness by Level of Education

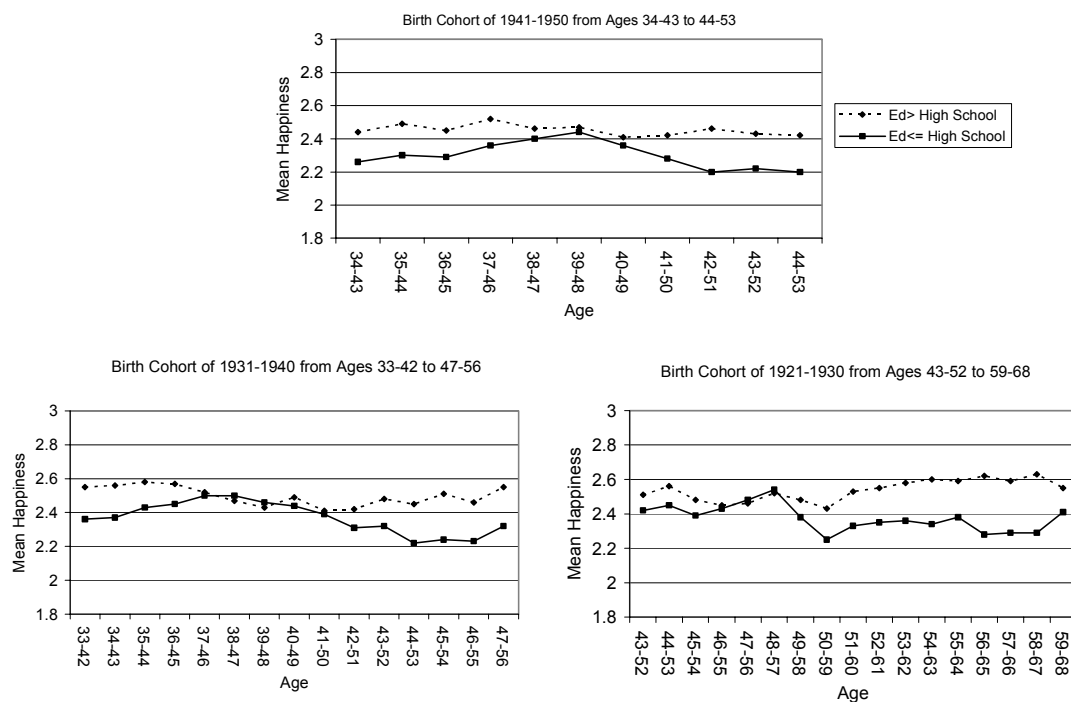


Table 7
Ownership of and Desires for Ten Big-Ticket Consumer Goods
Over Three 16-Year Segments of the Adult Life Cycle^a

	(1)	(2)	(3)
	<u>Stage of life cycle segment</u>		Change over life cycle segment
	Start	End	
<u>A. Early life cycle</u>			
1. Mean number of goods owned	1.7	3.1	+1.4
2. Mean number of goods desired	4.4	5.6	+1.2
<u>B. Mid life cycle</u>			
1. Mean number of goods owned	2.5	3.2	+0.7
2. Mean number of goods desired	4.3	5.4	+1.1
<u>C. Late life cycle</u>			
1. Mean number of goods owned	3.0	3.2	+0.2
2. Mean number of goods desired	4.4	5.0	+0.6
<u>D. Average for all three segments</u>			
1. Change in mean number of goods owned	--	--	+0.8
2. Change in mean number of goods desired	--	--	+1.0

Source: Roper-Starch Organization, 1979, 1995.

a. Early life cycle is from ages 18-29 in 1978 to 30-44 in 1994. Mid life cycle is from ages 30-44 in 1978 to 45-59 in 1994. Late life cycle is from ages 45-59 in 1978 to 60 and over in 1994.

Table 8
 Desires for Specified Big-Ticket Consumer Goods
 And Attainment of Desires over Three 16-Year Segments
 Of Adult Life Cycle^a

	(1)	(2)	(3)
	Desires over life cycle: percent who <u>want good at</u>		Attainment: percent who have <u>good at end</u>
	Start	End	
<u>A. Early life cycle</u>			
1. Travel abroad	39	46	7
2. Swimming pool	28	41	5
3. Vacation home	26	47	3
<u>B. Mid life cycle</u>			
1. Travel abroad	33	45	12
2. Swimming pool	22	38	6
3. Vacation home	28	45	6
<u>C. Late life cycle</u>			
1. Travel abroad	33	37	8
2. Swimming pool	14	23	2
3. Vacation home	26	33	3

Source: Roper-Starch Organization, 1979, 1995.

a. For life cycle stages see Table 7.

Table 9
Change in Ownership of and Desires for Ten Big-Ticket Consumer Goods in Specified Life
Cycle Stage, by Level of Education^a

	(1) Early <u>life cycle</u>	(2) Mid <u>life cycle</u>	(3) Mean of <u>Cols. 1 and 2</u>
A. <u>Change in mean number of goods owned</u>			
1. Education greater than 12 years	1.6	1.0	1.3
2. Education 12 years or less	1.1	0.4	0.8
B. <u>Change in mean number of goods desired</u>			
1. Education greater than 12 years	1.4	1.3	1.4
2. Education 12 years or less	1.0	0.9	1.0

Source: Roper-Starch Organization (1979, 1995).

a. For life cycle stages see Table 7.

Table 10
 Percent of Cohort that Has “a Lot of Money” at Beginning and End of
 Three 16-Year Segments of the Adult Life Cycle^a

	(1)	(2)
	Stage of	
	<u>life cycle segment</u>	
	Start	End
1. Early life cycle	2	4
2. Mid life cycle	1	7
3. Late life cycle	4	3

Source: Roper-Starch Organization, 1979, 1995.

a. For life cycle stages see Table 7.

Table 11
 Desires for a Happy Marriage and Attainment of Desires
 Over Three 16-Year Segments of the Adult Life Cycle^a

	(1)	(2)
	Stage of life	
	<u>cycle segment</u>	
	Start	End
<u>A. Early life cycle</u>		
1. Percent wanting a happy marriage	83	79
2. Percent who have a happy marriage	44	51
<u>B. Mid life cycle</u>		
1. Percent wanting a happy marriage	84	76
2. Percent who have a happy marriage	62	51
<u>C. Late life cycle</u>		
1. Percent wanting a happy marriage	85	75
2. Percent who have a happy marriage	66	46

Source: Roper-Starch Organization, 1979, 1995

a. For life cycle stages see Table 7.

Table 12
 Percent of Persons Wanting a Happy Marriage Among Those Who Do Not Have One,
 By Marital Status and Age, 1994

Marital status	(1)	(2)	(3)
	<u>Percent wanting happy marriage</u> All ages	Ages 18-44	Ages 45 and over
Married, not in happy marriage	56	58	55
Divorced or separated	63	73	55
Widowed	62	^a	62
Never-married	65	68	43

Source: Roper-Starch Organization, 1979, 1995.

a. Sample size less than 20.

Table 13
Desires for Children and Attainment of Desires Over
Three 16-Year Segments of the Adult Life Cycle^a

	(1)	(2)	(3)
	Stage of life cycle segment		Change over life cycle segment
	Start	End	
<u>A. Early life cycle</u>			
1. Desires: (a) Percent who want one or more children	71	69	--
(b) Mean number wanted	2.3	2.4	0.1
2. Attainment: Mean number have	1.0	2.0	1.0
<u>B. Mid life cycle</u>			
1. Desires: (a) Percent who want one or more children	72	66	--
(b) Mean number wanted	2.6	2.7	0.1
2. Attainment: Mean number have	2.0	2.2	0.2
<u>C. Late life cycle</u>			
1. Desires: (a) Percent who want one or more children	71	65	--
(b) Mean number wanted	3.0	2.8	-0.2
2. Attainment: Mean number have	2.6	2.4	-0.2

Source: Roper-Starch Organization, 1979, 1995

a. For life cycle stages, see Table 7. Mean number of children “wanted” and “have” is for persons who want children.

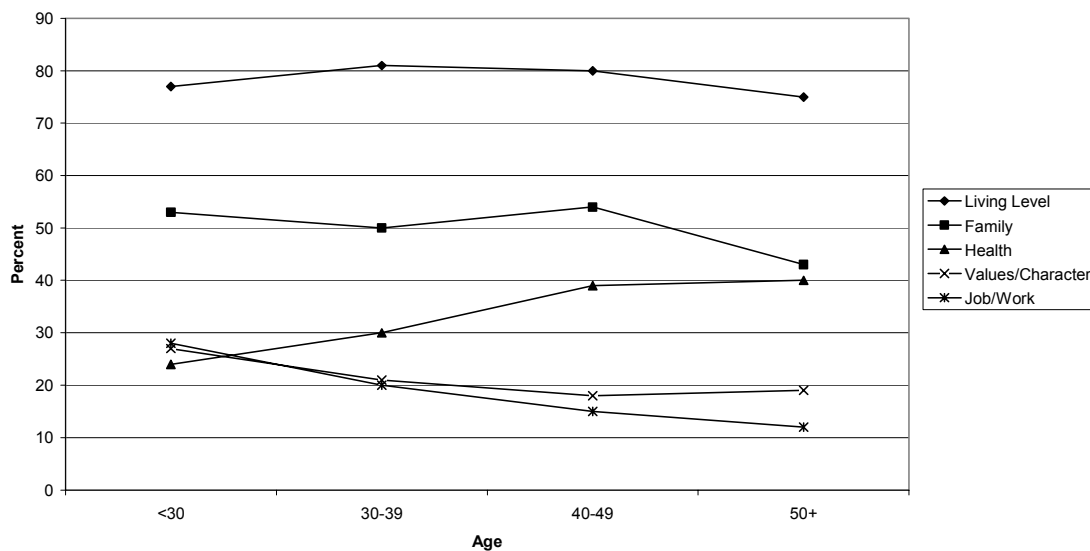
Table 14
 Desires for “a College Education for My Children”
 And Attainment of Desires over Three 16-Year Segments
 Of the Adult Life Cycle^a

	(1) Desires over life cycle: percent who <u>want good at</u> Start	(2) End	(3) Attainment: percent who have <u>good at end</u>
<u>A. Early life cycle</u>			
Percent wanting children’s college education	56	65	7
<u>B. Mid life cycle</u>			
Percent wanting children’s college education	65	65	24
<u>C. Late life cycle</u>			
Percent wanting children’s college education	56	59	30

Source: Roper-Starch Organization, 1979, 1995.

a. For life cycle stages, see Table 7.

Figure 8. Percent of Population Naming Specified Item as Important for Their Happiness, by Age , around 1960 (average for 12 countries)



Source : Cantril , 1965 , Appendix E. The countries are Brazil, Cuba, Dominican Republic, Egypt, India, Israel, Nigeria, Panama, Philippines, United States, West Germany and Yugoslavia. The rank order of items is virtually identical in all countries.

IZA Discussion Papers

No.	Author(s)	Title	Area	Date
727	M. Raiser M. Schaffer J. Schuchardt	Benchmarking Structural Change in Transition	4	02/03
728	M. Lechner J. A. Smith	What is the Value Added by Caseworkers?	6	02/03
729	A. Voicu H. Buddelmeyer	Children and Women's Participation Dynamics: Transitory and Long-Term Effects	3	02/03
730	M. Piva M. Vivarelli	Innovation and Employment: Evidence from Italian Microdata	2	02/03
731	B. R. Chiswick N. DebBurman	Educational Attainment: Analysis by Immigrant Generation	1	02/03
732	A. Frank A. Ichino	Clean Evidence on Peer Pressure	5	03/03
733	S. Wolter S. Denzler	Wage Elasticity of the Teacher Supply in Switzerland	2	03/03
734	S. Wolter	Sibling Rivalry: A Six Country Comparison	2	03/03
735	R. Desmet A. Jousten S. Perelman P. Pestieau	Micro-Simulation of Social Security Reforms in Belgium	3	03/03
736	I. Bolvig P. Jensen M. Rosholm	The Employment Effects of Active Social Policy	6	03/03
737	A. L. Booth M. Francesconi G. Zoega	Unions, Work-Related Training, and Wages: Evidence for British Men	3	03/03
738	V. Grossmann	Managerial Job Assignment and Imperfect Competition in Asymmetric Equilibrium	1	03/03
739	M. Fertig	Who's to Blame? The Determinants of German Students' Achievement in the PISA 2000 Study	1	03/03
740	B. T. Hirsch S. L. Mehay	Evaluating the Labor Market Performance of Veterans Using a Matched Comparison Group Design	6	03/03
741	B. T. Hirsch D. A. Macpherson	Wages, Sorting on Skill, and the Racial Composition of Jobs	5	03/03
742	R. A. Easterlin	Building a Better Theory of Well-Being	3	03/03

An updated list of IZA Discussion Papers is available on the center's homepage www.iza.org.