



## City Research Online

### City, University of London Institutional Repository

---

**Citation:** Plagnol, A. (2010). Subjective well-being over the life course: Conceptualizations and evaluations. *Social Research: an international quarterly of the social sciences*, 77(2), pp. 749-768. doi: 10.1353/sor.2010.0067

This is the unspecified version of the paper.

This version of the publication may differ from the final published version.

---

**Permanent repository link:** <https://openaccess.city.ac.uk/id/eprint/2549/>

**Link to published version:** <https://doi.org/10.1353/sor.2010.0067>

**Copyright:** City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

**Reuse:** Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

---

---

---

City Research Online:

<http://openaccess.city.ac.uk/>

[publications@city.ac.uk](mailto:publications@city.ac.uk)

---

Subjective well-being over the life course:  
conceptualizations and evaluations

Anke C. Plagnol

University of Cambridge

*Social Research: An International Quarterly*. 77(2), pp. 749-768 (Summer 2010).

Published version available at:

<http://socialresearch.metapress.com/link.asp?id=b468111r701k7148>

Address:

Anke Plagnol  
Department of Sociology  
Free School Lane  
Cambridge CB2 3RQ  
Email: az266@cam.ac.uk

How does subjective well-being change over the life course and what concepts do people draw upon when they answer questions about their well-being? Does well-being indeed change or are people endowed with a set level of happiness around which their well-being fluctuates? These are some of the questions this paper will address with a focus on three domains of life – namely family, work and health.

In recent years, social scientists have increasingly drawn their attention to the study of people's well-being as measured by subjective indicators. A search by Kahneman and Krueger (2006) revealed that between 2001 and 2005 more than 100 papers in economics employed self-reported life satisfaction or happiness measures compared with only four between 1991 and 1995. In psychology, research on subjective well-being developed somewhat earlier than in economics, partly as a reaction to the field's emphasis on unhappiness (Diener 1984; Diener et al. 1999). Similarly, research employing subjective well-being indicators has flourished in sociology (Sirgy et al. 2006). Subjective indicators have also been recognized as useful tools in designing and evaluating policy measures (Dolan & White 2007).

Subjective well-being (SWB) is often assessed through survey questions about an individual's overall life satisfaction or happiness. These two questions, though measuring somewhat different concepts, tend to behave in very similar ways in relation to socio-demographic characteristics and health variables, and are therefore often used interchangeably (Donovan et al. 2002; Frey & Stutzer 2002; Layard 2005). A typical survey question on life satisfaction asks the respondent to rate their satisfaction with life on a scale from zero to ten with zero meaning 'completely dissatisfied' and ten 'completely satisfied'. Survey respondents apparently have little difficulties answering questions about their subjective well-being, which is reflected in the low rate of refusals and 'don't know' responses. For instance, in the 1998

General Social Survey 17 percent of respondents did not state their income compared to less than one percent who did not rate their happiness (Kahneman & Krueger 2006).

A considerable advantage of subjective well-being measures is that survey respondents evaluate themselves which aspects of life are important for their well-being. Some often-used and seemingly objective measures, such as GDP per capita and educational attainment, are not truly objective in any case because someone had to decide what such measures should encompass (Sirgy et al. 2006). The use of objective indicators as measures of well-being is based on the assumptions that they indeed contain the factors that are important for one's well-being and that people's choices reflect accurately their level of well-being, which is often termed 'revealed preferences' in economics. However, individuals usually base their decisions on the utility that they expect to derive from their choices, and this expected utility often does not match the utility that individuals actually experience once they have made their choice (Kahneman 2000). Hence, individual choices may not reflect true utility.

If an analysis of well-being over the life course was based on objective indicators alone, one would conclude that, for instance, satisfaction with one's finances should mirror the life course trajectory of income. However, several studies have shown that this is not the case, and older people are surprisingly satisfied with their finances despite lower incomes after retirement (George 1992; Hansen et al. 2008). In fact, objective circumstances such as income may not be equally important for overall well-being across the life course.

Shin and Johnson (1978) describe that happiness can be regarded as "a global assessment of a person's quality of life according to his own chosen criteria" (Shin & Johnson 1978: 478). Measures of overall satisfaction with life allow respondents to

weigh each domain of life according to their own standards to form an evaluation of their satisfaction (Diener et al. 1985). The use of such measures, including self-rated happiness and life satisfaction, is based on the assumption that the effect of objective circumstances on individual well-being is mediated by psychological processes, such as social comparison, hedonic adaptation and changing aspirations. Social comparison refers to the psychological process through which people evaluate themselves in comparison to the standard of others in their peer group (also called reference group, frame of reference, norms, or standards; see for example Frank 1985; Frank 1997).

Hedonic adaptation, also known as habituation, involves a different form of comparison; here the individual's standard for comparison is his own past (e.g. Frederick & Loewenstein 1999). Hedonic adaptation is the psychological mechanism that is at the core of the so-called 'setpoint theory', which posits that a person's subjective well-being tends to center around a setpoint determined by genetics and personality (Kammann 1983; Lykken & Tellegen 1996). In this view, major life transitions and events merely deflect a person temporarily from this set level of well-being, but eventually complete adaptation to one's previous level of well-being will occur. Subjective well-being should therefore remain fairly constant over the life course. If setpoint theory was correct then any measures taken by individuals or policymakers to improve well-being would be fruitless (Easterlin 2003).

Support for setpoint theory in the form of rapid and complete adaptation to changes in circumstances has been found in some domains of life but not in all domains that are relevant for overall well-being (Lucas 2007). Most researchers now agree that individual well-being is not fixed, but can be altered by some changes in circumstances (Clark, Frijters et al. 2008; Diener et al. 2006), although the effects of such changes may vary between life domains and across life events (Angeles 2009;

Clark & Georgellis 2010; Ferrer-i-Carbonell & Van Praag 2008).

Both social comparison and hedonic adaptation mediate the influence of objective circumstances – such as an increase in income – on well-being. For instance, the initial positive effect of an increase in income on well-being diminishes often quickly due to hedonic adaptation – the individual habituates to the new level of consumption choices that are now possible and material aspirations rise. An increase in income may also lead to a change in one's reference group, especially if the individual subsequently moves to a more affluent neighborhood (see Luttmer 2005, for a study on the effect of neighbors' incomes on well-being).

## **Life course well-being**

It is important to take a life course perspective when examining people's subjective well-being as changes in the conceptualization and evaluation of well-being may be linked to life course transitions and events. Generally, an individual's life course consists of interdependent life trajectories, such as work and family trajectories. A life trajectory as described by Glen Elder is "a pathway defined by the aging process or by movement across the age structure" (Elder 1985: 31). The life course literature often distinguishes between life events and transitions which may change life course trajectories, where an event denotes an abrupt change while a transition implies a more gradual change (Settersten & Mayer 1997), but the present paper will not clearly separate the two. Many normative life transitions, such as family formation and retirement, usually occur at specific stages in the life course and are often denoted as 'turning points' in the life course literature (e.g. Wheaton & Gotlib 1997). Turning points do not necessarily only include unusual events, but also normative life transitions such as becoming a parent, as such transitions involve adjustment to new

social roles and thus changes in life trajectories. Such typical life transitions may have a negative impact on well-being if they are not experienced at the usual age (McLanahan & Sorensen 1985). For instance, family formation usually occurs in young adulthood while exit from the labor market is typically experienced towards the end of the life course. However, the timing and sequence of some of these transitions, including marriage and childbirth, have become less predictable for more recent cohorts, while that of others, such as retirement, have become more predictable (George 1993).

In the following, I will first consider to what extent what people consider to be important for their well-being changes with age – i.e. how they conceptualize well-being – and then discuss further how their evaluations of well-being change. Many of these shifts in conceptualizations and evaluations of well-being are related to changes in life circumstances, but the psychological mechanisms described above may mediate their impact.

## **Conceptualizations of well-being**

To date, there is little empirical research on what areas of life individuals reflect upon when they answer questions about their own well-being. Do they mainly consider their income, their family or whether the sun is shining that day? The life domain approach, described several decades ago by Angus Campbell and colleagues, posits that overall well-being depends on satisfaction with each of several domains of life (Campbell 1981; Campbell et al. 1976). According to this approach changes in life circumstances do not directly influence overall well-being, but rather impact on specific domains of life which are important for general well-being. Studies on domain satisfaction have consistently found that satisfaction with health, family, and

finances are most important for overall life satisfaction (see also Cummins 1996; Salvatore & Munoz Sastre 2001; Van Praag & Ferrer-I-Carbonell 2004; Van Praag et al. 2003), and it is therefore likely that these are the areas of life people reflect on when they assess their personal well-being. Studies on domain satisfaction typically do not ask individuals directly what matters for their well-being, but instead assess the relative weight of each domain for overall life satisfaction in regression analyses. However, studies in which people were asked about their priorities in life largely confirm these findings. For instance, the importance of finances, family and health was also identified in a cross-sectional study by Cantril (1965) which investigated people's personal concerns in a number of countries. Although some of the analyses cited here are based on measures of well-being other than life satisfaction or happiness – e.g. quality of life, notions of the 'good life' and people's concerns – the results are remarkably consistent across studies.

What people consider to be important for their own well-being does not remain fixed as they age, but changes over the life course. In a large longitudinal British survey, participants were asked what they considered to be important for their own quality of life. In contrast to most survey research on well-being this question was open-ended and allowed respondents to mention up to four things. The majority of respondents indicated that they considered health to be important for their quality of life, followed by family, finance, happiness and friends (Scott et al. 2009). However, these perceptions changed considerably with age and differed between genders. While more than 60 per cent of respondents aged 65 and above mentioned health as being important for their well-being, health was mentioned considerably less frequently by respondents who were younger than 26, with 34 and 29 per cent of women and men in that age group citing health respectively (Plagnol & Scott 2008).

Other domains that increased in importance over the life course included leisure, freedom and spiritual aspects, while family, finance, happiness, friends, home comforts and employment were of less importance at older ages. A qualitative analysis of the responses revealed that the well-being of others – most often family members – was often linked to perceptions of one’s own quality of life, and the importance of other’s well-being increased after life transitions such as parenthood (Scott et al. 2010). Some of the changes in conceptualizations of well-being were associated with life transitions, most notably family formation and retirement. Respondents who entered a partnership, either through cohabitation or marriage, were more likely to prioritize health, family and happiness afterwards (Plagnol & Scott 2008). At the same time the importance of friends declined, suggesting that individuals may replace social contacts with friends with contacts to their family. Similarly, people were more likely to mention family to be important for their quality of life after the birth of a first child, while the importance of friends declined. Not surprisingly, priorities shifted away from employment after retirement and more towards friends. Most of these changes in priorities were not merely temporary but persisted for more than five years after the life event had taken place. The study found only small differences between the effects of life events on the conceptualization of well-being of men and women although overall women were more likely to mention health, family and friends while men tended to prioritize employment, finances and leisure more than women did.

The advantage of these studies is that they are based on open-ended questions which allow respondents to give a variety of responses which researchers may not have expected and thus would not have included as answer categories in a closed question. The inclusion of open-ended questions in large-scale surveys is rare, but

other studies using closed questions and different measures also suggest that conceptualizations of well-being are not fixed. An American survey asked respondents what they considered to be part of the 'good life', i.e. the life they would like to have. Survey participants were asked to look at a list of items and call out which of these they considered to be part of the good life and which they already had. The first part of the question revealed the respondents' aspirations while the second part showed their attainments. The study found that the difference in aspirations and attainments for a happy family and material goods matched reasonably well satisfaction in the family and financial domains over the life course (Plagnol & Easterlin 2008).

More importantly for this paper though, aspirations for having a happy marriage did not remain constant over the life cycle, but rather started out at a high level at young ages, with more than 80 per cent of men and women wanting a happy marriage at age 19, and then declined with age. This decline in family aspirations may be related to experiences of marital dissolutions. In contrast, aspirations for owning a number of big-ticket consumer goods, such as a home, a car or a TV, were found to increase continuously for both men and women (Plagnol & Easterlin 2008). This increase may be related to hedonic adaptation; as people acquire some goods, say a car, they begin to desire other goods, including luxury items such as a swimming pool.

Despite the usual gradual decline in health across the life course, aspirations for good health were found to increase with age (Plagnol forthcoming), which may be related to the greater salience of the importance of good health as it declines. Although these two studies did not investigate the effect of life transitions on people's concept of the good life, they indicate that aspirations may be affected by changes in

life circumstances, such as declining health, marital dissolution and increased incomes.

Although survey questions on the 'good life' and what people consider to be important for their own quality of life may tap into somewhat different concepts, it seems clear from these studies that people's priorities for their life change with age and are most likely related to changes in life circumstances. However, these shifts in priorities may be affected by a focusing effect (Schkade & Kahneman 1998), which describes how people judge some aspects of their own or another person's life to be more important for their life than they actually are. Thus, the salience of recent events like the birth of a child may lead individuals to believe that these events will have a greater impact on their well-being than is actually the case. For instance, people often assume that individuals who suffer a great health shock, such as a serious accident which leaves them being paraplegic, must be considerably less happy than their healthy counterparts. Maybe surprisingly, paraplegics have been found to be only somewhat but not considerably less happy than others (Brickman et al. 1978). In a recent study Powdthavee (2009) found that people who became severely disabled eventually reverted to their previous levels of satisfaction in various domains of life, with the exception of satisfaction with health and income which remained significantly lower than before the onset of disability. As these are only two domains affecting overall life satisfaction, the overall well-being of disabled individuals may not be as low as others assume because third persons tend to overestimate the effect of one aspect of life on life overall. Such focusing effects (or illusions) can also occur with regards to one's own well-being and it is therefore important to investigate whether life events that alter individuals' conceptualizations of well-being also impact on their subjective *evaluation* of their general well-being. Fortunately, evaluations of

well-being, in the form of measures of life satisfaction or happiness, are more widely available than measures of conceptualizations of well-being.

## **Evaluations of well-being**

Empirical studies of subjective well-being over the life course usually find a U-shaped relationship between well-being and age, with happiness being highest when people are young or old (Blanchflower & Oswald 2004). Early studies on the relationship between age and well-being were often based on British, German and American data, but this finding has recently been replicated in a number of countries (Blanchflower & Oswald 2008). However, these studies account for many age-related differences in objective circumstances, such as income, health and marital status and thus do not reflect the unadjusted well-being of individuals across the life course (Easterlin 2006). Indeed, studies that do not account for life circumstances find this relationship to rather resemble an inverted-U, with happiness being highest in midlife (Easterlin 2006; Mroczek & Spiro 2005). Another study found declining life satisfaction after age 70 in both Germany and the United Kingdom (Baird et al. forthcoming). Similar to changes in conceptualizations of well-being, changes in life course subjective well-being may be related to life events and transitions.

The relationship between life events and life satisfaction has been well-established in the literature, and most researchers now agree that subjective well-being often changes significantly after important life events although complete or partial adaptation may occur in some domains (Lucas 2007). A recent analysis by Frijters et al. (2008) using Australian data implies that people adapt more slowly to negative life events. As there is a substantive literature on the topic, I will discuss some of the current evidence for selected life transitions separately.

## **Family formation**

Marriage typically occurs early in the life course with the mean age at first marriage across OECD countries in 2003 ranging from about age 25 in Poland to age 31 in Sweden (OECD 2008b). However, marriages are now often preceded by periods of cohabitation and some couples choose long-term cohabitation instead of marriage.

Most studies on subjective well-being and family formation focus on marriage as it is more widely included in large social surveys. The repeated conclusion of cross-sectional studies – i.e. surveys conducted at one point in time – is that there is a positive association between being married and life satisfaction (Argyle 1999; Blanchflower & Oswald 2004; Diener et al. 1999; Frey & Stutzer 2002). However, these studies merely observe correlations and cannot establish any causality between well-being and marriage as it is possible that happy people are simply more likely to get married than others (Stutzer & Frey 2006). A few panel studies also find a positive effect of marriage on well-being (Johnson & Wu 2002; Zimmermann & Easterlin 2006), while a prominent study by Lucas et al (2003) describes complete adaptation to pre-marriage well-being more than two years after the wedding. The results on the effect of marriage on well-being can therefore be best described as being mixed and seem to depend on whether pre-marital cohabitation has been accounted for as well as the methodology of the analysis, though the consensus is that there is at least a ‘honeymoon period’ surrounding the wedding during which individuals are significantly more satisfied with their lives than before.

Marriage is often quickly followed by the birth of a first child, although many couples now decide to have children outside marriage. The mean age of women at the birth of their first child ranged from 25 years in the United States to about 30 years in the United Kingdom across OECD countries in 2005 (OECD 2008a). The birth of a

first child has been found to have a positive effect on the well-being of the mother, though not on that of the father, after controlling for partnership status (Kohler et al. 2005). Other studies imply complete adaptation to having children (Clark, Diener et al. 2008; Clark & Georgellis 2010), however, this result may depend on the marital status of the parents as married couples seem to benefit from having children (Angeles forthcoming). The association between well-being and having children may also depend on the measure that is used. In one study children had a positive, significant effect on life satisfaction, while the association with happiness was not significant (Haller & Hadler 2006).

### **Family dissolution**

Although the findings on marriage may be mixed, divorce has consistently been found to negatively impact subjective well-being (Lucas 2005). However, well-being often improves several years after the divorce has taken place and individuals may be even better off than they were in the two years leading to divorce (Gardner & Oswald 2006). Indeed, divorce is usually preceded by a period of low life satisfaction as individuals anticipate divorce (Clark, Diener et al. 2008).

Another form of family dissolution which occurs usually later in life than divorce and can come rather unexpected is widowhood, which has been shown to have a strong negative effect on well-being (Clark, Diener et al. 2008; Lucas et al. 2003). Moreover, people adapt only slowly to widowhood and come close to their pre-widowhood level of subjective well-being only about 7 years after the loss of their spouse (Lucas et al. 2003).

## **Employment**

One of the more predictable life course transitions is retirement as many countries set a retirement age of around age 65 at which people qualify for public pensions.

Retirement may be expected to have a negative effect on subjective well-being through the corresponding decrease in income and the loss of occupational attachments. On the other hand, retirement may also be associated with increased well-being as individuals move out of stressful jobs, and indeed findings on retirement and subjective well-being are mixed (Charles 2004; Kim & Moen 2001, 2002).

A less predictable life event, which is not widely experienced and maybe therefore has a significant impact on well-being, is that of unemployment. Studies have consistently found that people who become unemployed do not completely return to their previous level of well-being (Clark & Oswald 1994; Lucas et al. 2004; Winkelmann & Winkelmann 1998), and the unemployed are less happy than others even after re-employment (Lucas et al., 2004).

## **Health**

Significant health shocks such as disability are experienced by only few individuals and the timing of such health shocks is not necessarily related to age. However, on average, people experience a gradual decline in health over the life course. Not surprisingly, most studies show a strong association between health and subjective well-being (for a short overview see Dolan et al. 2008), which implies that gradual declines in health may lower well-being at older ages and indeed satisfaction with health has been found to decrease with age (Easterlin 2006).

Although unexpected health shocks, such as disability after an accident, are not age-related, they still can provide some insight into the extent to which people

adapt to changes in their health. The seminal study by Brickman et al (1978) on paraplegics suggests that well-being after disability is not as low as would be expected by those who are not paraplegic, but this early study was based on point-in-time data and therefore does not allow any conclusions about the direction of causality between well-being and disability. A more recent study, using British longitudinal data, indicates that people indeed adapt somewhat with regards to well-being after becoming disabled, but they do not revert to the same level of well-being that they reported before the onset of disability (Oswald & Powdthavee 2008).

## **Discussion**

Changes in life circumstances in the three domains discussed in the previous section indicate that life events and transitions have an impact on people's evaluations of their subjective well-being. Some of these empirical studies were based on cross-sectional data collected at one point in time, and therefore do not provide much insight into the direction of causality between life events and well-being. However, more recent studies often employ panel data – i.e. repeated measures over time for the same individuals – which allows for an analysis of pre- and post-event subjective well-being.

In the family domain, family formation seems to have an impact on well-being, though the evidence in that domain is somewhat mixed. More pronounced effects on overall well-being could be seen in the health domain and in the work domain in the case of unemployment. It is likely that these life events may alter the life course trajectory of well-being, but as some of these events – including unemployment, divorce and disability – are experienced by only a small subset of the population, it is difficult to ascertain how these events may influence the average

pattern of life course well-being. Even normative life transitions, such as marriage, childbirth and retirement, are not experienced by all members of society.

Of course, individual life course trajectories of subjective well-being vary widely and differ from the U-shaped pattern found by Blanchflower and Oswald (2008; 2004). Nevertheless, changes in life course well-being may indicate that some of the shifts in priorities that people report after certain life events – as discussed earlier in the paper – are justified. If marriage and children make one happier, then shifting one's priorities towards family life after family formation would seem beneficial. However, further research is needed to investigate in detail to what extent conceptualizations and evaluations of well-being are correlated as it is possible that those who consider family to be important for their quality of life are also more likely to get married. These individuals may also benefit more from family formation than others. These issues deserve further attention as policy interventions could be used to draw people's attention to domains of life where improvements are likely to lead to increased subjective well-being, for example the health domain. People's conceptualizations of well-being could possibly be influenced by information campaigns, but is not yet clear whether such interventions would indeed be beneficial and desirable.

## References

- Angeles, L. (2009). Adaptation and anticipation effects to life events in the United Kingdom. Department of Economics, University of Glasgow, Discussion paper 2009-08.
- Angeles, L. (forthcoming). Children and life satisfaction. *Journal of Happiness Studies*.
- Argyle, M. (1999). Causes and Correlates of Happiness. In D. Kahneman, E. Diener & N. Schwarz (Eds.), *Well-Being: The Foundations of Hedonic Psychology* (pp. 365-367). New York: Russell Sage Foundation.
- Baird, B., Lucas, R., & Donnellan, M. (forthcoming). Life Satisfaction Across the Lifespan: Findings from Two Nationally Representative Panel Studies. *Social Indicators Research*.
- Blanchflower, D. G., & Oswald, A. (2008). Is well-being U-shaped over the life cycle? . *Social Science and Medicine*, 66, 1733–1749.
- Blanchflower, D. G., & Oswald, A. J. (2004). Well-being over time in Britain and the USA. *Journal of Public Economics*, 88(7-8), 1359-1386.
- Brickman, P., Coates, D., & Janoff-Bullman, R. (1978). Lottery Winners and Accident Victims: Is Happiness Relative. *Journal of Personality and Social Psychology*, 36(8), 917–927.
- Campbell, A. (1981). *The sense of well-being in America*. New York: McGraw-Hill.
- Campbell, A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life*. New York: Russell Sage Foundation.
- Cantril, H. (1965). *The Pattern of Human Concerns*. New Brunswick, NJ: Rutgers University Press.

- Charles, K. K. (2004). Is retirement depressing? Labor force inactivity and psychological well-being in later life. *Research in Labor Economics*, 23, 269 - 299.
- Clark, A., Diener, E., Georgellis, Y., & Lucas, R. (2008). Lags and leads in life satisfaction: A test of the baseline hypothesis. *Economic Journal*, 118, F222-F239.
- Clark, A. E., Frijters, P., & Shields, M. A. (2008). Relative income, happiness, and utility: an explanation for the Easterlin paradox and other puzzles. *Journal of Economic Literature*, 46(1), 95-144.
- Clark, A. E., & Georgellis, Y. (2010). Back to baseline in Britain: Adaptation in the BHPS. Paris School of Economics Working paper No. 2010 - 02.
- Clark, A. E., & Oswald, A. J. (1994). Unhappiness and Unemployment. *Economic Journal*, 104(424), 648-659.
- Cummins, R. A. (1996). The domains of life satisfaction: An attempt to order chaos. *Social Indicators Research*, 38, 303-328.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49, 71-75.
- Diener, E., Lucas, R. E., & Scollon, C. N. (2006). Beyond the hedonic treadmill: Revising the adaptation theory of well-being. *American Psychologist*, 61(4), 305-314.
- Diener, E., Suh, E., Lucas, R., & Smith, H. (1999). Subjective Well-Being: Three Decades of Progress. *Psychological Bulletin*, 125(2), 276-303.

- Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, 29, 94–122.
- Dolan, P., & White, M. (2007). How Can Measures of Subjective Well-Being Be Used to Inform Public Policy? *Perspectives on Psychological Science*, 2(1), 71-85.
- Donovan, N., Halpern, D., & Sargeant, R. (2002). Life satisfaction: The state of knowledge and implications for government. Strategy Unit of the British Government.
- Easterlin, R. A. (2003). Explaining Happiness. *Proceedings of the National Academy of Sciences*, 100(19).
- Easterlin, R. A. (2006). Life cycle happiness and its sources: Intersections of psychology, economics, and demography. *Journal of Economic Psychology*, 27, 463–482.
- Elder, G. H. (1985). Perspectives on the life course. In G. H. Elder (Ed.), *Life Course Dynamics: Trajectories and Transitions, 1968-1980* (pp. 23-49). Ithaca, NY: Cornell University Press.
- Ferrer-i-Carbonell, A., & Van Praag, B. M. (2008). Do people adapt to changes in income and other circumstances? The discussion is not finished yet. CREA & Institut d'Analisi Economica (IAE-CSIC).
- Frank, R. H. (1985). *Choosing the Right Pond: Human Behavior and the Quest for Status*. New York: Oxford University Press.
- Frank, R. H. (1997). The frame of reference as a public good. *The Economic Journal*, 100(19), 1832-1847.

- Frederick, S., & Loewenstein, G. (1999). Hedonic adaptation. In D. Kahneman & E. Diener (Eds.), *Well-Being: The Foundations of Hedonic Psychology* (pp. 302–329). New York: Russel Sage Foundation.
- Frey, B. S., & Stutzer, A. (2002). *Happiness and economics*. Princeton: Princeton University Press.
- Frijters, P., Johnston, D. W., & Shields, M. A. (2008). Happiness dynamics with quarterly life event data. IZA DP No. 3604.
- Gardner, J., & Oswald, A. (2006). Do divorcing couples become happier by breaking up? *Journal of the Royal Statistical Society Series A 169*, 319-336.
- George, L. K. (1992). Economic status and subjective well-being: A review of the literature and an agenda for future research. In N. E. Cutler, D. W. Gregg & M. P. Lawton (Eds.), *Aging, Money, and Life Satisfaction*. New York: Springer Publishing Company.
- George, L. K. (1993). Sociological Perspectives on Life Transitions. *Annual Review of Sociology*, 19, 353-373.
- Haller, M., & Hadler, M. (2006). How social relations and structures can produce happiness and unhappiness: An international comparative analysis. *Social Indicators Research*, 75, 169–216.
- Hansen, T., Slagsvold, B., & Moum, T. (2008). Financial satisfaction in old age: A satisfaction paradox or a result of accumulated wealth? *Social Indicators Research*, 89(2), 323-347.
- Johnson, D. R., & Wu, J. (2002). An empirical test of crisis, social selection, and role explanations of the relationship between marital disruption and psychological distress: A pooled time series analysis of four-wave panel data. *Journal of Marriage and the Family*, 64, 211–224.

- Kahneman, D. (2000). Experienced utility and objective happiness: A moment-based approach. In A. Tversky & D. Kahneman (Eds.), *Choices, Values, and Frames*. Cambridge: Cambridge University Press.
- Kahneman, D., & Krueger, A. B. (2006). Developments in the Measurement of Subjective Well-Being. *Journal of Economic Perspectives*, 20(1), 3–24.
- Kammann, R. (1983). Objective circumstances, life satisfactions, and sense of well-being: Consistencies across time and place. *New Zealand Journal of Psychology*, 12, 14-22.
- Kim, J. E., & Moen, P. (2001). Is Retirement Good or Bad for Subjective Well-Being? *Current Directions in Psychological Science*, 10(3), 83-86.
- Kim, J. E., & Moen, P. (2002). Retirement Transitions, Gender, and Psychological Well-Being: A Life-Course, Ecological Model. *Journal of Gerontology: Psychological Sciences*, 57B(3), P212–P222.
- Kohler, H. P., Behrman, J., & Skytthe, A. (2005). Partner +Children =Happiness? An Assessment of the Effect of Fertility and Partnerships on Subjective Well-Being. *Population and Development Review*, 31(3), 407–445.
- Layard, R. (2005). *Happiness: Lessons from a new science*. London: Penguin.
- Lucas, R. E. (2005). Time does not heal all wounds. A longitudinal study of reaction and adaptation to divorce. *Psychological Science*, 16(12), 945–950.
- Lucas, R. E. (2007). Adaptation and the Set-Point Model of Subjective Well-Being: Does Happiness Change After Major Life Events? *Current Directions in Psychological Science*, 16(2), 75-79.
- Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2003). Reexamining Adaptation and the Set Point Model of Happiness: Reactions to Changes in

- Marital Status. *Journal of Personality and Social Psychology*, 84(3), 527–539.
- Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2004). Unemployment Alters the Set Point for Life Satisfaction. *Psychological Science*, 15(1), 8-13.
- Luttmer, E. F. P. (2005). Neighbors as negatives: Relative earnings and well-being. *The Quarterly Journal of Economics*, 120(3), 963-1002.
- Lykken, D., & Tellegen, A. (1996). Happiness is a stochastic phenomenon. *Psychological Science*, 7, 186-189.
- McLanahan, S. S., & Sorensen, A. B. (1985). Life events and psychological wellbeing over the life course. In G. H. Elder (Ed.), *Life Course Dynamics: Trajectories and Transitions, 1968-1980* (pp. 217-238). Ithaca and London: Cornell University Press.
- Mroczek, D., & Spiro, A. (2005). Change in life satisfaction over 20 years during adulthood: Findings from the Veteran Affairs Normative Aging Study. *Journal of Personality and Social Psychology*, 88(1), 189-202.
- OECD. (2008a). SF5. Age of mother at first child's birth. OECD Family Database available at [www.oecd.org/els/social/family/database](http://www.oecd.org/els/social/family/database).
- OECD. (2008b). SF8. Marriage and divorce rates. OECD Family Database available at [www.oecd.org/els/social/family/database](http://www.oecd.org/els/social/family/database).
- Oswald, A., & Powdthavee, N. (2008). Does Happiness Adapt? A Longitudinal Study of Disability with Implications for Economists and Judges. *Journal of Public Economics*, 92, 1061-1077.
- Plagnol, A. C. (forthcoming). Chasing the 'good life': gender differences in work aspirations of American men and women. In E. Eckermann (Ed.), *Gender, Lifespan and Quality of Life: International Perspectives*: Springer.

- Plagnol, A. C., & Easterlin, R. A. (2008). Aspirations, Attainments, and Satisfaction: Life Cycle Differences Between American Women and Men. *Journal of Happiness Studies*, 9(4), 601-619.
- Plagnol, A. C., & Scott, J. (2008). What matters for well-being: Individual perceptions of quality of life before and after important life events. GeNet Working Paper No 33.
- Powdthavee, N. (2009). What happens to people before and after disability? focusing effects, lead effects, and adaptation in different areas of life. *Social Science & Medicine*, 69(12), 1834–1844.
- Salvatore, N., & Munoz Sastre, M. T. (2001). Appraisal of life; “area” versus “dimension” conceptualizations. *Social Indicators Research* 53(3), 229–255.
- Schkade, D. A., & Kahneman, D. (1998). Does living in california make people happy? A focusing illusion in judgments of life satisfaction. *Psychological Science*, 9(5), 340–346.
- Scott, J., Nolan, J., & Plagnol, A. C. (2009). Panel data and open-ended questions: Understanding perceptions of quality of life. *Twenty-First Century Society*, 4(2), 123-135.
- Scott, J., Plagnol, A. C., & Nolan, J. (2010). Perceptions of quality of life: Gender differences across the life course. In J. Scott, R. Crompton & C. Lyonette (Eds.), *Gender inequalities in the 21st century: New barriers and continuing constraints*: Edward Elgar.
- Settersten, R. A., Jr., & Mayer, K. U. (1997). The Measurement of Age, Age Structuring, and the Life Course. *Annual Review of Sociology*, 23, 233-261.
- Shin, D. C., & Johnson, D. M. (1978). Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research*, 5(1), 475-492.

- Sirgy, M. J., Michalos, A. C., Ferriss, A. L., Easterlin, R. A., Patrick, D., & Pavot, W. (2006). The quality-of-life (QOL) research movement: Past, present, and future. *Social Indicators Research*, 76(3), 343–466.
- Stutzer, A., & Frey, B. S. (2006). Does marriage make people happy, or do happy people get married? *Journal of Socioeconomics*, 35(2), 326–347.
- Van Praag, B. M. S., & Ferrer-I-Carbonell, A. (2004). *Happiness quantified: A satisfaction calculus approach*. Oxford: Oxford University Press.
- Van Praag, B. M. S., Frijters, P., & Ferrer-I-Carbonell, A. (2003). The anatomy of subjective well-being. *Journal of Economic Behavior and Organization*, 51, 29–49.
- Wheaton, B., & Gotlib, I. H. (1997). Stress and adversity over the life course: Trajectories and turning points. In I. H. Gotlib & B. Wheaton (Eds.), *Trajectories and turning points over the life course: concepts and themes* (pp. 1-25). Cambridge: Cambridge University Press.
- Winkelmann, L., & Winkelmann, R. (1998). Why are the Unemployed so Unhappy? Evidence from Panel Data. *Economica*, 65(257), 1–15.
- Zimmermann, A. C., & Easterlin, R. A. (2006). Happily Ever After? Cohabitation, Marriage, Divorce, and Happiness in Germany. *Population and Development Review*, 32(3), 511-528.