Published in final edited form as:
Educ Gerontol. 2012 ; 38(11): 742–752. doi:10.1080/03601277.2011.645424.

Age Differences in Goal Concordance, Time Use, and Well-Being

Yiwei Chen and
Psychology Department, Bowling Green State University, Bowling Green, Ohio, USA

Yue-Ting Lee
Psychology Department, University of Toledo, Toledo, Ohio, USA

Olivia L. Pethtel, **Michael S. Gutowitz**, and **Robert M. Kirk**
Psychology Department, Bowling Green State University, Bowling Green, Ohio, USA

Abstract

The primary purpose of the present study was to investigate age differences in goal concordance, time use, and Well-Being. Past research has found that despite age-related decline in life circumstances (e.g., health), the Well-Being of older adults is as high as young adults. The present study used a novel approach to explore the Paradox of Well-Being. One hundred and seventy-seven adults participated in the study. They first generated their three most important personal strivings and rated levels of goal concordance for external, introjected, identified, and intrinsic reasons. Then, they reported their actual and ideal time use in 10 categories of activities in the past 24 hours. Finally, Well-Being was assessed by the Flourishing Scale and the Scale of Positive and Negative Experience (Diener, Wirtz, et al., 2010). Older adults did not differ from young adults in overall Well-Being. However, they held higher levels of goal concordance and were more likely to spend time in spirituality and religion-related activities than young adults. The relationships between goal concordance, time use, and Well-Being were examined separately for young and older adults. Implications were discussed to improve Well-Being for young and older adults.

Well-Being is a multifaceted construct of both global evaluation of life satisfaction and momentary experience of positive and negative emotions (Diener, 2009). Some theorists (Deci & Ryan, 2000; Ryff, 1989) have suggested that Well-Being is based on universal human needs and positive functioning. There is growing evidence from the Well-Being research that positive functioning, including both experienced positive emotions and evaluative components of Well-Being, plays an important role in motivating behavior change and predicting important health outcomes (Fredrickson, 2001, 2006). For example, individuals who frequently experience positive emotions are more likely to show greater self-regulatory and coping abilities (e.g., Fredrickson & Joiner, 2002); have bolstered immune systems (Stone et al., 1994); and even live longer lives (e.g., Danner, Snowdon, & Friesen, 2001).

Well-Being has been associated with a wide variety of factors including demographic status (accounting for 8%–15% of the variation, see Diener, Suh, Lucas, & Smith, 1999); personality traits and attitudes (e.g., Diener & Lucas, 1999); and goal characteristics (e.g., McGregor & Little, 1998). Lyubomirsky, Sheldon, and Schkade (2005) summarized three primary types of determinants of the chronic happiness level: (a) the genetically determined happiness set points (e.g., affective personality traits such as neuroticism and extraversion)

Address correspondence to Yiwei Chen, Psychology Department, Bowling Green State University, Bowling Green, OH 43403. ywchen@bgsu.edu.

explain about 50% of the variation in individuals' Well-Being; (b) life circumstances (such as marital status, income, health, and religious affiliation) account for about 10%; and (c) the remaining 40% depends on goals we pursue and intentional activities that we actively engage in. In addition, different components of Well-Being may be predicted by different sets of factors. Using the first representative sample of the planet Earth, Diener, Ng, Harter, and Arora (2010) found that income was a moderate predictor of life satisfaction, but a much weaker predictor of positive and negative emotions. In contrast, emotions were mostly associated with the fulfillment of psychological needs such as competence, autonomy, and relatedness.

Studying aging and Well-Being can provide a unique opportunity to examine the psychological processes underlying Well-Being judgments (Diener, 2009). Well-Being is thought to reflect one's life circumstances and many of these life circumstances decline in old age. For example, income levels and social resources often decrease and the experience of health problems increases with age. It is also well-documented that effortful cognitive functions, such as divided attention, working memory, and reasoning, decline with age (Park & Doris, 2006; Salthouse, 2006). But most research in the past has found Well-Being judgments remain quite stable and sometimes even increase in old age (Diener & Suh, 1998; Lucas & Gohm, 2000; Pinquart, 2001). Using experience sampling, Carstensen, Pasupathi, Mayr, and Nesselroade (2000) found that positive emotions remained stable across the adult lifespan, whereas negative emotions declined in older adults. The Paradox of Well-Being is also consistent with our own findings on cross-cultural aging (Pethtel & Chen, 2010). Both American and Chinese older adults showed similar levels of life satisfaction and positive affect, but lower levels of negative affect than young adults.

In contrast to declined cognitive functions, emotion regulation seems to improve with increasing age (Blanchard-Fields, 2007; Charles & Carstensen, 2010). There is also some evidence suggesting that the influence of various factors on judgments of life satisfaction change with age (Siedlecki, Tucker-Drob, Oishi, & Salthouse, 2008). While health was very important in predicting older adults' Well-Being, the influence of fluid intelligence on Well-Being declined with age. Kunzmann, Little, and Smith (2000) found that age was positively related to positive affect and negatively related to negative affect, controlling for functional health. Thus, it is likely that with aging and changes in physical, cognitive, and emotion regulation abilities, older adults may shift their goals in systematic ways, and these shifts may affect their judgments of Well-Being. Consistent with Erikson's (1963) notions of psychosocial development, Sheldon and Kasser (2001) found that older adults listed more personal strivings concerning generativity and ego integrity, and fewer strivings related to identity and intimacy compared to young adults.

To tackle the Paradox of Well-Being, we usually ask the following question: How do older adults maintain Well-Being despite the deterioration of so many life circumstances (e.g., health, cognitive functioning, and socioeconomic status)? However, all life circumstances combined only account for 8% to 15% of the variance in happiness level (Diener et al., 1999). According to the hedonic treadmill hypothesis (Kahneman, 1999), people adapt quickly to new life circumstances, regardless of whether it is considered bad (e.g., a physical disability) or good (e.g., a salary raise), and return to their genetically determined happiness set points. Thus, research focusing on older adults' life circumstances has limited potential for understanding the paradox. The correct question we should ask is this: What do older adults do to maximize their Well-Being?

Humans use goals to direct their activities. Lyubomirsky et al. (2005) found that about 40% of Well-Being was determined by goals people pursue and intentional activities that people actively engage in. Several theories, the Selective Optimization and Compensation

framework (Baltes & Baltes, 1990), the Socioemotional Selectivity Theory (Carstensen, Isaacowitz, & Charles, 1999), and the Self-Concordance model (Sheldon & Elliot, 1999), converge on the view that aging is associated with prioritizing a smaller set of goals that promote Well-Being. Specifically, the Self-Concordance model took a humanistic perspective (the Self-Determination Theory, Deci & Ryan, 1985) and applied it to the study of self-generated personal goals (Emmons, 1999). Self-concordance is defined conceptually as the degree to which one's self-chosen initiatives match and represent one's developing interests and core values (Sheldon & Elliot, 1999). Operationally, personal goals were rated on four dimensions: external pushes, introjected sanctions characterized by anxiety and guilt, identified motivation, and intrinsic interests. Goal concordance was computed by summing the identified and intrinsic ratings and subtracting the introjected and external ratings (Sheldon & Kasser, 2001). It was found that people improved in their ability to select self-concordant goals as they grew older, and that the pursuit of greater self-concordant goals led to greater Well-Being (Sheldon, Houser-Marko, & Kasser, 2006).

According to the Sustained Happiness Model (Lyubomirsky et al., 2005), the most promising means of improving one's happiness level is through intentional activities. Intentional activities are goal-directed actions or practices in which people can choose to engage and require some degree of effort to enact. The present study used a novel measure of time use (Sheldon, Cummins, & Kamble, 2010) to compare young and older adults' actual and ideal time use of the past 24 hours in 10 activity categories (i.e., sleeping, school, paid work, commuting, household chores, community, recreation, personal relationships, health and self-maintenance, and spirituality or religion). Actual time use can reflect human goal-directed activities but may be constrained by reality. Thus, ideal time use was also included to probe desired activities free of reality constraints.

The primary purpose of the present study was to investigate age differences in goal concordance, time use (i.e., both actual and ideal time spent in different domains of activities), and Well-Being. Well-Being was assessed on both evaluative and experienced components. Specifically, a new Flourishing Scale developed by Diener and colleagues (Diener, Wirtz, et al., 2010) was used to measure the evaluative component of Well-Being. This scale evaluated human optimal functioning ranging from positive relationships, to feelings of competence, to having meaning and purpose in life. A widely-used Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985; Pavot, Diener, Colvin, & Sandvik, 1998) was also included to compare with the new Flourishing Scale. In the past, Watson, Clark, and Tellegen's (1988) Positive and Negative Affect Schedule (PANAS) has been commonly used to assess people's experiences of positive and negative emotions. Diener and colleagues (Diener, Wirtz, et al., 2010) pointed out several limitations of using the PANAS in measuring adults' Well-Being. First, it assesses some states that are usually not considered to be emotions (e.g., strong, alert, active and determined). Second, it fails to measure a number of positive and negative emotions that are important to Well-Being (e.g., love or joyful, sad or depressed). Furthermore, the PANAS has more problems when it applies to the aged population. For example, young adults may score higher than older adults on terms of "active" and "strong" even if they feel no more positive than older adults. In contrast, older adults may be more likely to feel "contented" and "happy" than younger adults, although these emotions were not assessed by the PANAS. The current study used the Scale of Positive and Negative Experience (SPANE; Diener, Wirtz, et al., 2010) to assess adults' positive and negative emotions.

Based on the Self-Concordance model (Sheldon & Elliot, 1999), it was hypothesized that older adults would select goals of higher levels of self-concordance than young adults. However, no significant age differences were expected in Well-Being. The Paradox of Well-

Being would be addressed by examining actual and ideal time use of young and older adults that related to both goal concordance and Well-Being.

METHOD

Participants

One hundred and seventy-seven adults participated in the experiment. There were 69 young adults (55 female, age range 18 to 27 years old, $M = 19.84$, $SD = 1.28$) participating at a large midwestern university in exchange for course credit. One hundred and eight older adults were recruited through local communities to participate in the study (71 female, age range 40 to 89 years old, $M = 57.05$, $SD = 13.08$). The majority of the sample was Caucasian (89.3%), with 5.1% African American, 2.3% Hispanic, 0.6% Asian, and 2.8% selecting the "other" category for race/ethnic background. The two age groups did not differ significantly in years of education. However, young adults ($M = 3.31$, $SD = 0.65$) rated themselves healthier than older adults ($M = 2.93$, $SD = 0.61$) on a four-point scale (1 = *Poor*, 2 = *Fair*, 3 = *Good*, and 4 = *Excellent*).

Measures

Participants first completed a demographics/background questionnaire which included questions on age, gender, race/ethnicity, education, and self-rated health.

Personal Strivings—Based on Emmons (1999), participants were asked to generate their three most important personal strivings in "the past four weeks." Participants were instructed, "We are interested in the things that you typically or characteristically are trying to do in your everyday behavior. Think about the objectives that you are typically trying to accomplish or attain. We call these personal strivings." Examples were given and it was stressed that these personal strivings may be about something that is typically sought out or about something that is avoided. For each of the personal strivings, participants rated the extent to which they pursued each striving for the following four different reasons, using a seven-point scale (1 = *strongly disagree*, 7 = *strongly agree*). This was the external reason: "You pursue this striving because somebody else wants you to or because the situation demands it." This was the introjected reason: "You pursue this striving because you would feel ashamed, guilty, or anxious if you didn't." This was the identified reason: "You pursue this striving because you really believe it is an important goal to have." And this was the intrinsic reason: "You pursue this striving because of the fun and enjoyment that it provides you." A self-concordance measure was computed by summing the identified and intrinsic ratings and subtracting the introjected and external ratings (Sheldon & Kasser, 2001).

Time Use Table—The time use table (Sheldon, et al., 2010) focused on actual and ideal time spent in 10 different activities (i.e., sleeping, school, paid work, household chores, community, recreation, commuting, personal relationships, health and self-maintenance, and spirituality or religion) of the past 24 hours. Participants were instructed as follows: "This is a question about how you spent your time yesterday. In the Table below there are 10 areas of life. You have 24 separate hours to allocate between these 10 areas of life. Please allocate these time units to represent how you actually spent your time yesterday. If you allocate no time to any domain, just leave it blank." Then, participants completed the task a second time, thinking about their ideal time use.

Flourishing Scale—The eight-item scale (Diener, Wirtz, et al., 2010) was used to assess human optimal functioning ranging from positive relationships to having meaning and purpose in life. Participants used a seven-point scale (1 = *strongly disagree*, 7 = *strongly*

agree) to indicate their agreement with eight statements, such as "I lead a purposeful and meaningful life."

Scale of Positive and Negative Experience *(SPANE)*—Based on Diener, Wirtz, et al. (2010), the SPANE was used to assess adults' positive and negative emotions "in the previous four weeks." The SPANE includes broad predicates for positive (i.e., positive, good, pleasant, happy, joyful, and contented) and negative emotions (i.e., negative, bad, unpleasant, sad, afraid, and angry). Participants rated the 12 emotions, using a five-point scale (1 = *Very rarely* or *Never*; 5 = *Very often* or always).

Satisfaction with Life Scale *(SWLS)*—The five-item SWLS (Diener et al., 1985) assessed global evaluation of a person's life. Participants used a seven-point scale (1 = *Strongly disagree*, 7 = *Strongly agree*) to indicate their agreement to five statements, such as "In most ways, my life is close to my ideal." High scores indicated higher levels of life satisfaction. The SWLS showed higher internal consistency and temporal reliability (Pavot et al., 1998).

Design and Procedure

Participants first filled out the demographics/background questionnaire. Then they were asked to generate three important personal strivings for the past four weeks and rate the degree to which they pursued each striving in terms of external, introjected, identified, and intrinsic reasons. They were also asked to report how they spent the past 24 hours in 10 domains of activities (i.e., sleeping, school, paid work, household chores, community, recreation, commuting, personal relationships, health and self-maintenance, and spirituality or religion). Finally, they rated their psychological well-being, positive and negative affect, and life satisfaction for the past four weeks. After they finished the survey, they were thanked and debriefed.

RESULTS

Age Differences in Well-Being

Well-Being was assessed using both the evaluative component, which we referred to as Psychological Well-Being (PWB; measured by the Flourishing Scale), and the experienced component (reported positive and negative affect in SPANE). An emotional balance measure was computed by subtracting ratings of negative affect from ratings of positive affect. No significant age differences were found for PWB, $t(173.45) = 1.60$, $p = .09$, or emotional balance, $t(175) = -.32$, $p = .76$.

As expected, young and older adults did not differ in Well-Being. The evaluative and experienced components of Well-Being were positively correlated with one another, $r(177) = .60$, $p < .001$. PWB and life satisfaction were positively correlated, $r(176) = .61$, $p < .001$. Emotional balance and life satisfaction were also positively correlated, $r(176) = .52$, $p < .001$.

Age Differences in Goal Concordance

T tests were performed to examine age differences in the four subscales: external, introjected, identified, and intrinsic strivings. Significant age differences were found in the external ratings: older adults had significantly lower levels of external strivings than young adults, $t(174) = 2.15$, $p < .05$. There were no significant age differences for introjected ($t(173) = 1.50$, $p = .13$), identified ($t(173) = -.53$, $p = .60$), and intrinsic ($t(174) = -.34$, $p = .73$) strivings. Please see Figure 1 for age differences in all four subscales. A composite score of goal self-concordance was computed by summing the identified and intrinsic ratings and

subtracting the introjected and external ratings. Older adults (M=2.76, SD=3.01) had significantly higher levels of self-concordant goals than younger adults (M=1.65, SD=3.13), t(173)=−2.34, p<.05.

Age Differences in Time Use

To address the Paradox of Well-Being, age differences in actual time use of the past 24 hours were examined using t tests. Significant age differences were found for the following specific activities in actual time use: school, work, household chores, personal relationships, and spirituality. The scores reflected the amount of time (hours) spent towards 10 categories of activities within the past 24-hour period (please see Table 1). Older adults spent significantly less time in pursuing school-related activities than younger adults, t(77.33)=21.40, p<.001. In contrast, they spent significantly more time in pursuing work-related activities than younger adults, t(166.53)=−7.58, p<.001. Older adults used their time towards conducting household chores significantly more than younger adults, t(140.07)=−7.84, p<.001, but spent significantly less time towards personal relationships compared to younger adults, t(175)=2.43, p<.05. Finally, older adults spent significantly more time in spirituality and religion-related activities than younger adults, t(165.66)=−4.27, p<.001. There were no age differences in actual time use for community activities (t(175)=1.32, p=.19), recreation activities (t(175)=−.36, p=.72), commuting (t(175)=−.90, p=.37), and health-related activities (t(175)=1.02, p=.31).

For ideal time use, significant age differences were also found for the following specific activities: sleep, school, work, chores, community, recreation, and spirituality (please see Table 1). Older adults needed significantly less ideal sleep time than younger adults, t(175)=2.13, p<.05. Older adults also reported significantly less desire to pursue school-related activities than younger adults, t(71.36)=16.08, p<.001, but significantly more desire to pursue work-related activities than younger adults, t(174.98)=−5.28, p<.001. Older adults wanted to spend significantly more time doing household chores than younger adults, t(169.82)=−5.41, p<.001, to have more community time than younger adults, t(174.86)=−2.22, p<.05, and to do more recreational activities than younger adults, t(175)=−2.05, p<.05. Finally, older adults reported the desire to pursue more spirituality and religion-related activities than younger adults, t(175)=−2.44, p<.05. There were no significant age differences in ideal commuting time (t(175)=−1.28, p=.20) and ideal time spent in personal relationships (t(175)=−.51, p=.61).

Relationships among Goal Concordance, Time Use, and Well-Being

Correlations between goal concordance, time use and the two components of Well-Being were analyzed separately for each age group. Within the younger adult age group, goal concordance was correlated positively with PWB, r(68)=.33, p<.01, and with emotional balance, r(68) =.45, p<.001. In addition, young adults' actual recreation time was negatively correlated with PWB, r(69)=−.27, p<.05, whereas ideal time use in health and self-maintenance was positively related to emotional balance, r(69)=.25, p<.05. Finally, the more time they desired for spirituality and religion-related activities, the higher their PWB, r(69)=.25, p<.05.

Within the older adult age group, goal concordance was correlated positively with PWB, r(107)=.25, p<.01, and with emotional balance, r(107)=.26, p<.01. PWB was positively correlated with actual work time, r(108)=.22, p<.05, but negatively correlated with actual recreation time, r(108)=−.34, p<.001. For ideal time use, time spent on household chores was negatively related to PWB, r(108)=−.19, p<.05. Similarly, ideal recreation time was also negatively related to PWB, r(108)=−0.21, p<.05. In contrast, the more time they desired for spirituality and religion-related activities, the higher their PWB, r(108)=.21, p<.

05. In addition, ideal recreation time was negatively related to emotional balance, $r(108)=-.26$, $p<.01$.

Prediction of Well-Being

Results of hierarchical regression analysis revealed that self-rated health, goal concordance, actual recreation time, and ideal spirituality time explained 29% of the variance in Well-Being, $F(4,170)=17.12$, $p<.001$. Self-rated health significantly predicted Well-Being ($b=.35$, $t(170)=5.43$, $p<.001$), as did goal concordance ($b=.19$, $t(170)=2.91$, $p<.01$), actual recreation time ($b=-.25$, $t(170)=-3.76$, $p<.001$), and ideal spirituality time ($b=.16$, $t(170)=2.43$, $p<.05$). When entering self-rated health first, the addition of the goal concordance variable significantly improved prediction of Well-Being (R^2 change=.06. $F=11.88$, $p<.001$), as did the addition of the actual recreation time variable (R^2 change=.06. $F=14.95$, $p<.001$) and the ideal time spent in spirituality and religion-related activities (R^2 change=.03. $F=5.90$, $p<.05$).

DISCUSSION

Understanding what people value and how they use time to pursue their goals is at the core of Well-Being research. The present study used a novel approach to explore the Paradox of Well-Being. Despite age-related decline in life circumstances (e.g., health), older adults' Well-Being was found to be just as high as young adults'. Results of the current study suggest that having more intrinsic life goals and spending more time in beneficial daily activities might be the key to improving Well-Being.

Based on the Selective Optimization and Compensation framework (Baltes & Baltes, 1990), the Socioemotional Selectivity Theory (Carstensen et al., 1999), and the Self-Concordance model (Sheldon & Elliot, 1999), we expected that older adults would show higher levels of goal concordance than young adults. Results supported this prediction. In the present study, goal concordance was rated on four dimensions: external, introjected, identified, and intrinsic reasons. It was found that older adults were less likely than young adults to hold personal strivings for external reasons. Their overall levels of goal concordance were higher than those of young adults. The results were consistent with the major goal theories and recent empirical findings (Ebner, Freund, & Baltes, 2006; Sheldon, et al., 2006). Sheldon and Elliot (1999) have suggested that the self-concordance of goals plays a dual role: first, those who pursue self-concordant goals put more sustained effort into achieving those goals and, thus, are more likely to attain them; second, those who attain self-concordant goals reap greater psychological Well-Being benefits from their attainment.

According to the Sustained Happiness Model (Lyubomirsky et al., 2005), the most promising means of improving one's happiness level is through intentional activity. Intentional activities are goal-directed actions or practices in which people can choose to engage and require some degree of effort to enact. Young and older adults may have different goals at different life stages. As results show, they may spend their time differently in conducting different types of activities. The present study used 10 general categories of activities (i.e., sleeping, school, paid work, commuting, household chores, community, recreation, personal relationships, health and self-maintenance, and spirituality or religion) to capture age differences in both actual and ideal time use profiles. Consistent with their corresponding life stages (Erikson, 1963), older adults reported spending less time in school-related activities and personal relationships than younger adults. They reported spending significantly more time in work-related activities, household chores, and spirituality and religion-related activities than younger adults. Contrary to popular belief, actual work time was positively related to older adults' Well-Being whereas actual recreation time was negatively related to Well-Being for both young and older adults.

Ideal time use may reflect goal-congruent intentional activities without much reality constraints. Older adults desired to spend less time in sleep and school-related activities than young adults, but they wanted to pursue more work-related activities, do more household chores, spend more time in communities, have more recreation, and engage in more spirituality and religion-related activities than young adults. Again, contrary to expectation, ideal recreation time was negatively related to Well-Being for older adults. Wanting to spend time in spirituality and religion-related activities was correlated positively to Well-Being for both young and older adults. Further regression analyses on prediction of Well-Being suggested that goal concordance, actual recreation time, and ideal spirituality time contributed to Well-Being above and beyond the impact of health. Our results supported the Sustained Happiness Model (Lyubomirsky et al., 2005) that goals and intentional activities may improve Well-Being despite individuals' life circumstances (i.e., health). One qualification, though, may be that individuals do not always have insights on what kinds of activities may be good for their Well-Being. For instance, older adults desired more time in recreation, but ideal recreation time was negatively associated with Well-Being. Most people think that long work hours are detrimental to Well-Being, but our results suggest a positive relationship between work time and Well-Being. A positive finding is that both young and older adults seemed to understand the beneficial effects of spirituality and religion-related activities on Well-Being. As Lyubomirsky, Dickerhoof, Boehm, and Sheldon (2011) suggested, "Becoming happier takes both a will and a proper way."

Limitations and Future Directions

The results of the current study may be interpreted with its limitations in mind. First, we used convenient samples of young college students and community-dwelling older adults. This may influence the generalizability of our results to the larger population. Future research may use online surveys to reach a more diverse population. Second, the present study relied on self-report. Although goals, time use, and Well-Being are inherently subjective, future research may incorporate some objective measures for physical and cognitive capacities. Third, the results were correlational so caution needs to be taken when interpreting them. For example, actual work time was positively correlated with Well-Being for older adults. Thus, the more time individuals spent in work, the higher their levels of Well-Being. But the opposite direction was just as likely: only adults who had higher levels of Well-Being could spend more time in work. Finally, the present study used a cross-sectional design to study age differences in goal concordance, time use, and Well-Being. Future research may use a longitudinal design to develop interventions to improve Well-Being for young and older adults.

REFERENCES

Baltes, PB.; Baltes, MM. Psychological perspectives on successful aging: The model of selective optimization with compensation. In: Baltes, PB.; Baltes, MM., editors. Successful aging: Perspectives from the behavioral sciences. Cambridge University Press; New York, NY: 1990. p. 1-34.

Blanchard-Fields F. Everyday problem solving and emotion: An adult developmental perspective. Current Directions in Psychological Science. 2007; 16:26–31.

Carstensen L, Isaacowitz D, Charles S. Taking time seriously: A theory of socioemotional selctivity. Science Watch. 1999; 54:165–181.

Carstensen L, Pasupathi M, Mayr U, Nesselroade J. Emotional experience in everyday life across the lifespan. Journal of Personality and Social Psychology. 2000; 79:644–655. [PubMed: 11045744]

Charles ST, Carstensen LL. Social and emotional aging. Annual Review of Psychology. 2010; 61:383–409.

Danner DD, Snowdon DA, Friesen WV. Positive emotions in early life and longevity: Findings from the nun study. Journal of Personality and Social Psychology. 2001; 80:804–813. [PubMed: 11374751]

Deci, E.; Ryan, R. Intrinsic motivation and self-determination in human behavior. Plenum; New York, NY: 1985.

Deci E, Ryan R. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry. 2000; 11:227–268.

Diener, E. Assessing well-being: The collected works of Ed Diener. Springer Science+Business Media; New York, NY: 2009. p. 247-266.

Diener E, Emmons RA, Larsen RJ, Griffin S. The satisfaction with life scale. Journal of Personality Assessment. 1985; 49:71–75. [PubMed: 16367493]

Diener, E.; Lucas, RE. Personality and subjective well-being. In: Kahneman, D.; Diener, E.; Schwartz, N., editors. Well-being: The foundations of hedonic psychology. Russell Sage Foundation; New York, NY: 1998. p. 213-229.

Diener E, Ng W, Harter J, Arora R. Wealth and happiness across the world: Material prosperity predicts life evaluation, whereas psychosocial prosperity predicts positive feeling. Journal of Personality and Social Psychology. 2010; 99:52–61. [PubMed: 20565185]

Diener E, Suh E. Subjective well-being and age: An international analysis. Annual Review of Gerontology and Geriatrics. 1998; 17:304–324.

Diener E, Suh EM, Lucas RE, Smith HL. Subjective well-being: Three decades of progress. Psychological Bulletin. 1999; 125:276–302.

Diener E, Wirtz D, Tov W, Kim-Prieto C, Choi D, Oishi S, Biswas-Diener R. New measures of well-being: Flourishing and positive and negative feeling. Social Indicators Research. 2010; 97:143–156.

Deci, E.; Ryan, R. Intrinsic motivation and self-determination in human behavior. Plenum; New York, NY: 1985.

Deci E, Ryan R. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry. 2000; 11:227–268.

Ebner N, Freund A, Baltes P. Developmental changes in personal goal orientation from young to late adulthood: From striving for gains to maintenance and prevention of losses. Psychology and Aging. 2006; 21:664–678. [PubMed: 17201488]

Emmons, R. The psychology of ultimate concerns: Motivation and spirituality in personality. Guilford; New York, NY: 1999.

Erikson, EH. Children and society. 2nd ed. W.W. Norton & Co; New York, NY: 1963.

Fredrickson BL. The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. American Psychologist. 2001; 56:218–226. [PubMed: 11315248]

Fredrickson BL. Unpacking positive emotions: Investigating the seeds of human flourishing. The Journal of Positive Psychology. 2006; 1(2):57–59.

Fredrickson BL, Joiner T. Positive emotions trigger upward spirals toward emotional well-being. Psychological Science. 2002; 13:172–175. [PubMed: 11934003]

Kahneman, D. Objective happiness. In: Kahneman, D.; Diener, E.; Schwarz, N., editors. Well-being: The foundations of hedonic psychology. Russell Sage Foundation; New York, NY: 1999. p. 3-25.

Kunzmann U, Little TD, Smith J. Is age-related stability of subjective well-being a paradox? Cross-sectional and longitudional evidence from the Berlin Aging Study. Psychology and Aging. 2000; 15:511–526. [PubMed: 11014714]

Lucas, RE.; Gohm, CL. Age and sex differences in subjective well being across cultures. In: Diener, E.; Suh, E., editors. Culture and subjective well-being. The MIT Press; Cambridge, MA: 2000. p. 13-36.

Lyubomirsky S, Dickerhoof R, Boehm JK, Sheldon KM. Becoming happier takes both a will and a proper way: An experimental longitudinal intervention to boost well-being. Emotion. 2011; 11(2): 391. [PubMed: 21500907]

Lyubomirsky S, Sheldon K, Schkade D. Pursuing happiness: The architecture of sustainable change. Review of General Psychology. 2005; 9:111–131.

McGregor I, Little BR. Personal projects, happiness, and meaning: On doing well and being yourself. Journal of Personality and Social Psychology. 1998; 74:494–512. [PubMed: 9491589]

Park, D.; Doris, P. Working memory across the adult lifespan. In: Bialystok, E.; Craik, FIM., editors. Lifespan cognition: Mechanisms of change. Oxford University Press; New York, NY: 2006. p. 128-42.

Pavot W, Diener E, Colvin C, Sandvik E. Further validation of the Satisfaction With Life Scale: Evidence for the cross-method convergence of well-being measures. Journal of Personality Assessment. 1998; 57:149–161. [PubMed: 1920028]

Pethtel O, Chen Y. Cross-cultural aging in cognitive and affective components of subjective well-being. Psychology and Aging. 2010; 25:725–730. [PubMed: 20853976]

Pinquart M. Age differences in perceived positive affect, negative affect, and affect balance in middle and old age. Journal of Happiness Studies. 2001; 2:375–405.

Ryff C. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. Journal of Personality and Social Psychology. 1989; 57:1069–1081.

Salthouse, T. Aging of thought. In: Bialystok, E.; Craik, FIM., editors. Lifespan cognition: Mechanisms of change. Oxford University Press; New York, NY: 2006. p. 274-284.

Sheldon KM, Cummins R, Kamble S. Life balance and well-being: Testing a novel conceptual and measurement approach. Journal of Personality. 2010; 78:1093–1134. [PubMed: 20545821]

Sheldon KM, Houser-Marko L, Kasser T. Does autonomy increase with age? Comparing the goal motivations of college students and their parents. Journal of Research in Personality. 2006; 40:168–178.

Sheldon KM, Elliot A. Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. Journal of Personality and Social Psychology. 1999; 76:482–497. [PubMed: 10101878]

Sheldon KM, Kasser T. Getting older, getting better? Personal strivings and psychological maturity across the life span. Developmental Psychology. 2001; 37:491–501. [PubMed: 11444485]

Siedlecki KL, Tucker-Drob EM, Oishi S, Salthouse TA. Life satisfaction across adulthood: Different determinants at different ages? The Journal of Positive Psychology. 2008; 3:153–164. [PubMed: 19865605]

Stone AA, Neale JM, Cox DS, Napoli A, Vadlimarsdottir V, Kennedy-Moore E. Daily events are associated with a secretory immune response to an oral antigen in men. Health Psychology. 1994; 13:440–446. [PubMed: 7805639]

Watson D, Clark LA, Tellegen A. Development and validation of brief measures of positive and negative affect: The PANAS scales. Journal of Personality and Social Psychology. 1988; 54:1063–1070. [PubMed: 3397865]

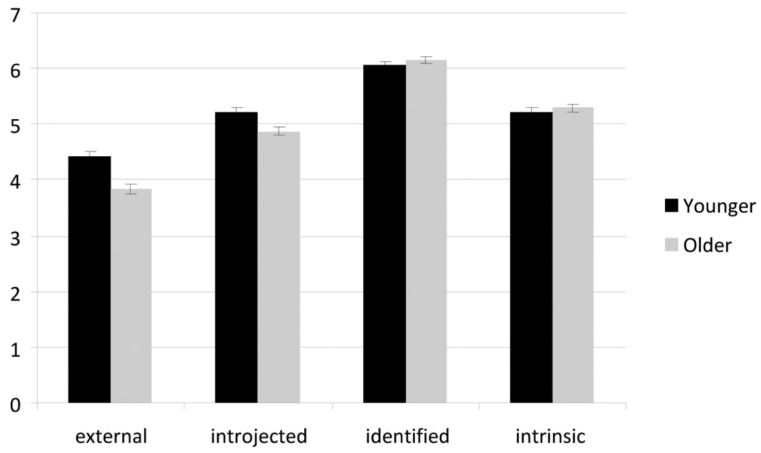

FIGURE 1.
Age differences in the four subscales of goal concordance.

TABLE 1

Means and Standard Deviations of Actual and Ideal Time Use by Age Group

	Actual time use		*Ideal time use*	
	Younger adults	***Older adults***	***Younger adults***	***Older adults***
Sleep	7.46 (1.46)	7.14 (1.23)	8.07 * (.94)	7.68 (1.33)
School	4.93 * (1.80)	0.14 (.59)	4.41 * (2.20)	0.10 (.43)
Work	1.64 * (2.13)	5.31 (4.28)	1.82 * (2.22)	4.09 (3.51)
Chores	1.01 * (.65)	2.63 (1.98)	0.78 * (.75)	1.67 (1.42)
Community	1.09 (1.17)	0.85 (1.19)	1.09 * (.86)	1.47 (1.39)
Recreation	2.42 (1.35)	2.50 (1.59)	1.94 * (1.68)	2.46 (1.62)
Commute	0.55 (.54)	0.64 (.63)	0.26 (.41)	0.34 (.45)
Relationships	2.77 * (1.40)	2.27 (1.31)	3.20 (1.66)	3.38 (2.52)
Health	1.77 (1.06)	1.60 (1.02)	1.70 (.99)	1.72 (.90)
Spirituality	0.33 * (1.14)	0.88 (.56)	0.74 * (.96)	1.09 (.91)

* Significant differences between means are indicated next to the first mean in each comparison.