

The Development of Self-Esteem

Ulrich Orth<sup>1</sup>

University of Bern

Richard W. Robins

University of California, Davis

This article has been accepted for publication but has not been through the copyediting, typesetting, pagination, and proofreading process. This article may not exactly replicate the final version published in the journal. It is not the copy of record. Please cite this article as follows:

Orth, U., & Robins, R. W. (2014). The development of self-esteem. *Current Directions in Psychological Science*, 23, 381-387.

<http://dx.doi.org/10.1177/0963721414547414>

## Abstract

In this article, we review new insights gained from recent longitudinal studies examining the development of self-esteem and its influence on important life outcomes. The evidence suggests that (a) self-esteem increases from adolescence to middle adulthood, peaks at about age 50 to 60 years, and then decreases at an accelerating pace into old age; moreover, there are no cohort differences in the self-esteem trajectory from adolescence to old age; (b) self-esteem is a relatively stable, but by no means immutable, trait; individuals with relatively high (or low) self-esteem at one stage of life are likely to have relatively high (or low) self-esteem decades later; and (c) high self-esteem prospectively predicts success and well-being in life domains such as relationships, work, and health. Given the increasing evidence that self-esteem has important real-world consequences, the topic of self-esteem development is of considerable societal significance.

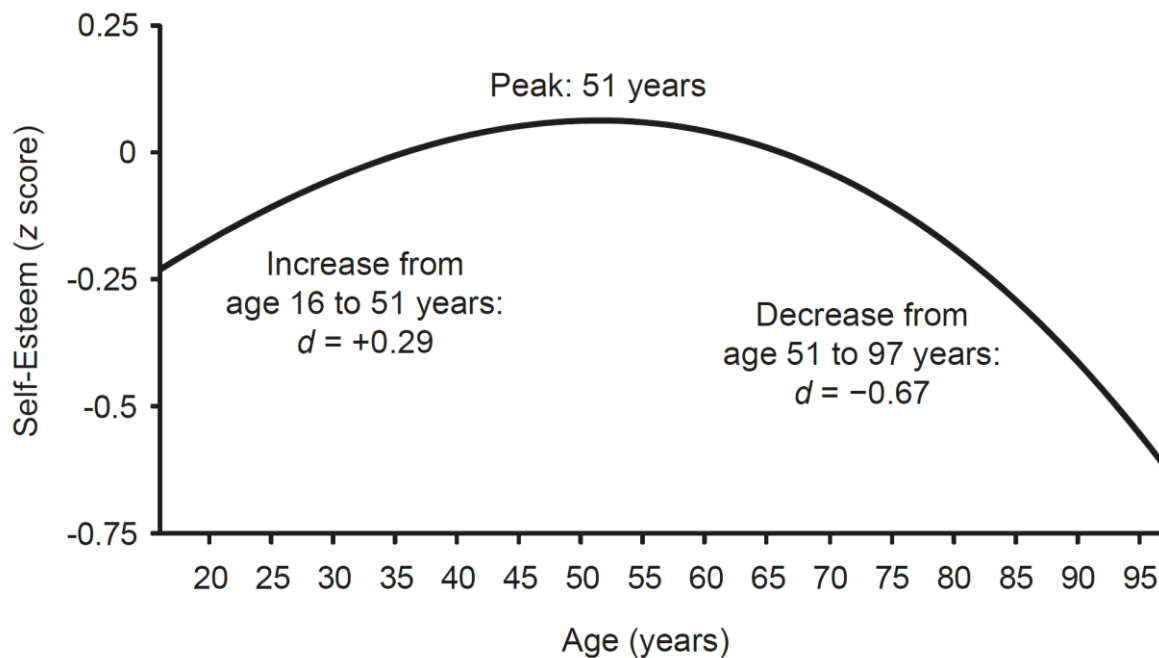
*Keywords:* self-esteem, lifespan development, longterm stability, life outcomes, longitudinal

The concept of self-esteem is ubiquitous in contemporary life. In classrooms and workplaces, sporting events and music recitals, people generally assume that high self-esteem is critical to success in that domain. Indeed, the promotion of self-esteem, and the prevention of low self-esteem, is widely perceived as an important societal goal that merits widespread intervention to boost self-esteem levels in the population. Yet, until recently, the scientific literature provided few insights into the nature and development of self-esteem. In the past several years, a large number of longitudinal studies have significantly advanced the field. In this paper, we review the new insights gained from these studies, addressing the following fundamental questions: What is the typical, or normative, pattern of self-esteem change from adolescence to old age—that is, at which stages of life do people typically show increases or decreases in self-esteem? How stable are individual differences in self-esteem across long periods or, put differently, is self-esteem a trait like shyness and intelligence or state like transient feelings of fear and embarrassment? And, finally, is self-esteem truly consequential—does it influence important life outcomes?

Self-esteem refers to an individual's *subjective* evaluation of his or her worth as a person (see, e.g., Donnellan, Trzesniewski, & Robins, 2011; MacDonald & Leary, 2012). Importantly, self-esteem does not necessarily reflect a person's objective talents and abilities, or even how a person is evaluated by others. Moreover, self-esteem is commonly conceptualized as the “feeling that one is ‘good enough,’” and consequently individuals with high self-esteem do not necessarily believe they are superior to others (Rosenberg, 1965, p. 31). Thus, self-esteem involves feelings of self-acceptance and self-respect, in contrast to the excessive self-regard and self-aggrandizement characterizing narcissistic individuals (Ackerman et al., 2011).

### **Lifespan Trajectory of Self-Esteem**

At which stages of life do people tend to have high self-esteem and when does self-esteem reach its nadir? Two recent longitudinal studies with large, diverse samples (one of which was nationally representative) have provided new insights into the lifespan trajectory of self-esteem (Orth, Robins, & Widaman, 2012; Orth, Trzesniewski, & Robins, 2010). Previous lifespan studies had been cross-sectional and, consequently, suffered from the interpretational ambiguities of cross-sectional data (e.g., confounding age-related changes with cohort differences). Although individuals may differ in the particular trajectory they follow, the new longitudinal evidence suggests that self-esteem tends to increase from adolescence to middle adulthood, peak at about age 50 to 60 years, and then decrease at an accelerating pace into old age. Figure 1 illustrates this pattern using data from Orth et al. (2012).



*Caption of Figure 1.* Average predicted trajectory of self-esteem from age 16 to 97 years, based on cohort-sequential longitudinal data from a large sample repeatedly assessed across 12 years

(Orth et al., 2012). The self-esteem measure was converted to  $z$  scores for the analysis ( $z$  scores have a mean of 0 and a standard deviation of 1). Self-esteem increased from adolescence to midlife and then decreased at accelerating pace into old age. The curvilinear function provided for a better fit than alternative functions. Effect sizes are reported as  $d$  values, indicating that the increase from age 16 to 51 corresponded to a small to medium effect size, and the decrease from age 51 to 97 to a medium to large effect size. The figure has been adapted from Orth et al. (2012). Copyright © 2012 by the American Psychological Association (APA). Adapted with permission. The official citation that should be used in referencing this material is Orth, U., Robins, R. W., & Widaman, K. F. (2012). Life-span development of self-esteem and its effects on important life outcomes. *Journal of Personality and Social Psychology*, *102*, 1271-1288. The use of APA information does not imply endorsement by APA.

In addition, there is a growing body of longitudinal studies that track the self-esteem trajectory during critical developmental periods such as adolescence (Birkeland, Melkevik, Holsen, & Wold, 2012; Erol & Orth, 2011; Kuzucu, Bontempo, Hofer, Stallings, & Piccinin, 2013; Morin, Maiano, Marsh, Nagengast, & Janosz, 2013; Steiger, Allemand, Robins, & Fend, 2014), young adulthood (Chung et al., 2014; Wagner, Lang, Neyer, & Wagner, 2014; Wagner, Lüdtkke, Jonkmann, & Trautwein, 2013; Zeiders, Umaña-Taylor, & Derlan, 2013) and old age (Wagner, Gerstorf, Hoppmann, & Luszcz, 2013; Wagner et al., 2014). Overall, the results of these studies are consistent with the lifespan trajectory depicted above; that is, they show increases from adolescence to midlife and then decreases into old age.

Inconsistent findings, however, have been reported with regard to the size of the self-esteem decline in old age. Whereas some studies suggest relatively strong decreases (Orth et al.,

2012; Orth et al., 2010; Shaw, Liang, & Krause, 2010), other studies have found that the self-esteem decrease in old age is small (Wagner, Gerstorf, et al., 2013; Wagner et al., 2014). Thus, further research on the old-age trajectory is needed. Given that declines in health, cognitive abilities, and socioeconomic status moderate the self-esteem decline in old age (Orth et al., 2010; Wagner, Gerstorf, et al., 2013), suggesting that the self-esteem decline is small when individuals can maintain their health and wealth during old age, it is possible that between-study differences in old age are accounted for by differences in the average levels of moderating factors.

Although men typically report higher levels of self-esteem than women, gender does not have a strong influence on the developmental trajectory of self-esteem; that is, both men and women tend to show increases in self-esteem from adolescence to midlife and then declines in old age (Erol & Orth, 2011; Orth et al., 2012; Orth et al., 2010; Wagner, Gerstorf, et al., 2013). However, ethnic minorities do not show the same patterns of self-esteem change as majority group members. For example, the trajectory of African Americans (compared to Americans of European descent) increased more sharply during adolescence and young adulthood (Erol & Orth, 2011), but then declined more rapidly during old age (Orth et al., 2010). Importantly, the difference between these two ethnic groups during old age held even after controlling for differences in income, employment status, and physical health (Orth et al., 2010). In addition to gender and ethnicity, recent research suggests that individuals with particular personality traits are more likely to experience increases in their self-esteem as they go through life; specifically, individuals who are emotionally stable, conscientious, and extraverted tend to show more positive self-esteem development than those low on these traits (Erol & Orth, 2011; Wagner, Lüdtkke, et al., 2013).

Another aspect of self-esteem—besides its level (i.e., low vs. high)—is the degree to which it fluctuates in response to external contingencies, such as experiences of success and failure (Crocker & Wolfe, 2001). Highly contingent self-esteem is generally considered maladaptive, because it suggests that the individual does not have a stable, core sense of their self-worth. Consistent with the finding that people generally exhibit healthy self-esteem development from adolescence to middle adulthood, a recent study suggests that self-esteem becomes progressively less contingent, exhibiting fewer short-term fluctuations, as people go through their adolescent and adult years (Meier, Orth, Denissen, & Kühnel, 2011). Whether this adaptive change continues into old age awaits future research.

Finally, because many of the longitudinal studies discussed above include data from multiple birth cohorts, researchers were able to test for cohort differences in the lifespan trajectory of self-esteem. It is possible that sociocultural changes during the 20<sup>th</sup> century have influenced the lifespan trajectory of self-esteem (see, e.g., the “Generation Me” hypothesis suggested by Twenge and colleagues; Gentile, Twenge, & Campbell, 2010; Twenge, 2006). For example, secular changes such as an increasing cultural focus on self-esteem, grade inflation in education, and increasing self-presentation in the social media might lead to a more positive self-esteem trajectory. However, the evidence from multiple cohort studies does not support the claim of secular changes in the self-esteem trajectory (Erol & Orth, 2011; Orth et al., 2012; Orth et al., 2010). Instead, the findings suggest that the typical lifespan trajectory of self-esteem has not changed during the past century. These null findings are meaningful for two reasons. First, statistical power was sufficiently large to test for even very small cohort effects because sample sizes ranged from about 1,800 to 7,000 participants. Second, two of the studies used national probability samples, greatly strengthening the generalizability of the findings.

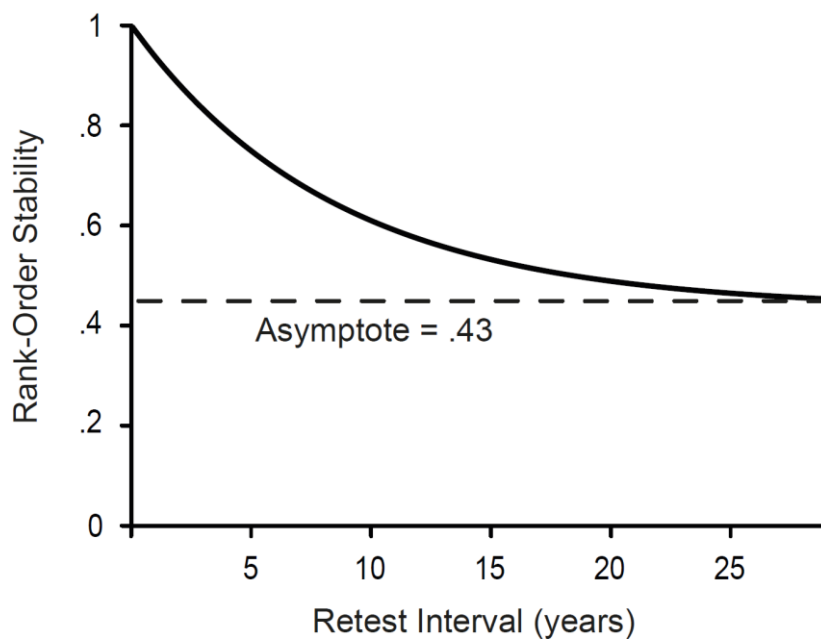
### **Longterm Stability of Individual Differences in Self-Esteem**

Do individuals with relatively high (or low) self-esteem at one stage of life tend to have relatively high (or low) self-esteem at subsequent stages of life? Does self-esteem exhibit trait-like stability or state-like fluctuations over time; in other words, is self-esteem more like mood, varying from context to context, or more like personality and intelligence, manifesting only slow, gradual changes over long periods of time? Recent data support the latter position. Two recent longitudinal studies spanning decades (Donnellan, Kenny, Trzesniewski, Lucas, & Conger, 2012; Kuster & Orth, 2013) have examined the stability of individual differences in self-esteem. Latent trait-state models (i.e., statistical models that partition the variance into stable and variable components) indicated that a trait factor is needed to explain the patterns of change observed in these studies. Across both studies, about 70 to 85% of the variance was accounted for by trait factors, and only 15 to 30% was state variance or measurement error.

Moreover, Kuster and Orth (2013) examined the pattern of stability in self-esteem across intervals of differing length, up to 29 years, on the basis of test-retest correlations (which reflect the degree to which the rank order of individuals is maintained over time). A rank-order stability coefficient of 1 indicates perfect stability and a coefficient of 0 indicates a complete absence of stability. As would be expected, as the time interval increased, stability coefficients became smaller. Importantly, however, stability did not approach 0, but asymptotically approached a medium-sized value, estimated as .43 (Figure 2). This pattern of results held for men and women, and across all age groups from adolescence to old age. These findings suggest that we can foretell an individual's relative level of self-esteem (where they stand relative to others) across decades of life. Thus, despite theoretical claims to the contrary, self-esteem does not fluctuate continuously over time, in response to the inevitable mix of successes and failures we



all experience as we go through life. Instead, we seem to build up a foundation of self-worth that is at least somewhat resistant to these transient factors. Taken together, the new findings suggest that self-esteem should be thought of as a relatively stable, but by no means immutable, trait, with a level of stability that is comparable to basic personality characteristics such as neuroticism and extraversion (Fraley & Roberts, 2005).



*Caption of Figure 2.* Stability of individual differences in self-esteem as a function of the test-retest interval, based on data from a 29-year longitudinal study with six assessments of a large sample (Kuster & Orth, 2013). A rank-order stability coefficient of 1 indicates perfect stability and a coefficient of 0 indicates complete absence of stability. The results indicated that, as test-retest intervals increased, stability exponentially decayed and asymptotically approached a nonzero value, estimated as .43. The figure has been adapted from Kuster, F., & Orth, U. (2013). The long-term stability of self-esteem: Its time-dependent decay and nonzero asymptote.

*Personality and Social Psychology Bulletin*, 39, 677-690. Copyright © 2013 by SAGE

Publications. Adapted by permission of SAGE Publications.

### **Influences of Self-Esteem on the Development of Important Life Outcomes**

In the previous two sections, we have seen that self-esteem is a relatively enduring characteristic of individuals, despite a backdrop of small, but pervasive shifts over the life course in the average level of self-esteem. Both findings—the enduring nature of self-esteem and its tendency to increase and decrease at particular developmental turning points—raise the same question: Does it matter how high an individual's, or the population's, self-esteem is? Do people with high self-esteem truly experience better relationships, work, and health, or is high self-esteem simply a reflection of success in these domains? This question is critically important from a practical perspective because if self-esteem is consequential then improving self-esteem should have a beneficial effect on the individual's life success. Moreover, the question is important from a theoretical perspective given that, due to the paucity of prospective studies at the time, an earlier review concluded that self-esteem is “not a major predictor or cause of almost anything” (Baumeister, Campbell, Krueger, & Vohs, 2003, p. 37).

Since Baumeister et al.'s (2003) review, several well-designed, longitudinal studies have tested for prospective effects of self-esteem on life outcomes (Kuster, Orth, & Meier, 2013; Marshall, Parker, Ciarrochi, & Heaven, 2014; Orth, Robins, Trzesniewski, Maes, & Schmitt, 2009; Orth et al., 2012; Trzesniewski et al., 2006). The results of these studies provide strong evidence that self-esteem is predictive of a person's success and well-being in important life domains, even after taking into account prior levels of self-esteem and success. Most studies used cross-lagged designs, which test for the direction of effects between self-esteem and life outcomes: across studies, the general pattern of results was that high self-esteem is a predictor, not a consequence, of life success. The studies covered a wide range of possible outcomes,

including satisfaction in marriage and close relationships, social network size and social support, physical health, mental health, education, employment status, job success and job satisfaction, and criminal behavior. Importantly, these studies used methodologically rigorous designs; for example, most studies aggregated the findings across multiple waves of data, which increases the reliability of the findings, and several studies controlled for theoretically plausible third variables such as gender, socioeconomic status, and intelligence. Also, the studies used data from large community samples (often with about 1,000 participants or more), strengthening the conclusions that can be drawn. The findings support the specificity matching principle described by Swann, Chang-Schneider, and McClarty (2007), which states that broad predictors (such as global self-esteem) are better predictors of broad outcomes (e.g., a cumulative index of adjustment problems) than specific outcomes (e.g., tobacco dependence; Trzesniewski et al., 2006).

In addition, Boden, Fergusson, and Horwood (2007, 2008) tested the prospective effects of adolescent self-esteem on life outcomes in young adulthood. In these analyses, the effects of self-esteem became weak or nonsignificant after controlling for an unusually large number of covariates (as many as 23). Although controlling for third variables can be informative, controlling for this many covariates decreases the precision and, consequently, the validity of the estimates of interest, limiting the conclusions that can be drawn. For statistical reasons (e.g., multicollinearity), virtually every predictor will become nonsignificant if a sufficiently large number of third variables are introduced in the model. Moreover, some of the covariates controlled for might be mediating mechanisms rather than confounds. For example, controlling for depression might reduce the effect of low self-esteem on drug use, not because depression is a third variable that creates a spurious association between self-esteem and drug use, but because depression mediates the causal effect of low self-esteem on drug dependence. That is, low self-

esteem is a known risk factor for depression (Sowislo & Orth, 2013), which in turn is a known risk factor for drug use. Thus, in the studies by Boden et al. (2007, 2008), some of the covariates controlled for are better conceptualized as mediating mechanisms rather than confounds, and, consequently, the analyses they report do not allow for valid conclusions about the causal status of self-esteem.

### **Future Directions and Implications**

Research in the field of self-esteem development has recently made several steps forward, based on robust evidence from longitudinal studies, many of which included large and representative samples, long study periods, multiple waves of data, and sophisticated statistical modeling. Nevertheless, much work remains to be done. For example, more research is needed for tracking the self-esteem trajectory in childhood. Although theory as well as cross-sectional data suggest that self-esteem decreases from childhood to adolescence (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002), the self-esteem drop during middle childhood is not consistently supported by longitudinal studies (Cole et al., 2001; Huang, 2010; Kuzucu et al., 2013).

Moreover, a better understanding is needed of those factors that shape self-esteem development. Although we now have relatively strong evidence that self-esteem influences life outcomes (as reviewed above), the evidence on the causes of self-esteem is still limited. For example, it would be desirable to know whether, and if so how, positive and negative life events alter a person's self-esteem trajectory (for a discussion of appropriate research designs, see Luhmann, Orth, Specht, Kandler, & Lucas, in press). Also, given that theory emphasizes the interpersonal dimension of self-esteem (Leary, 2012), future research should more strongly consider self-esteem development within the context of close relationships (Erol & Orth, 2014).

Future research should also examine the extent to which self-esteem stability is produced by cognitive biases (e.g., selective attention to positive vs. negative information about the self) versus actual stability of the more objective sources of self-esteem (e.g., competencies, social acceptance, successful life experiences, etc.). However, the fact that self-esteem systematically rises and falls across the lifespan suggests that stability of self-esteem cannot be explained exclusively by biases in information processing.

The research reviewed in this article has several important implications. First, the findings about the normative lifespan trajectory are important because for a long time researchers believed that self-esteem does not show systematic change at any point of the life course (see, e.g., Wylie, 1979). Moreover, longitudinal studies have ruled out an important possible confound—i.e., systematic differences between birth cohorts; the evidence suggests that the average lifespan trajectory has not changed during the 20<sup>th</sup> century. Second, a substantial portion of individual differences in self-esteem is completely stable across decades, indicating that self-esteem is a personality trait like neuroticism and extraversion. Third, longitudinal evidence suggests that self-esteem is consequential for the individual's success in domains such as relationships, work, and health. Finally, the findings have important practical implications because they point to developmental periods in which individuals are vulnerable due to low self-esteem (such as adolescence and old age) and help identifying risk factors for problematic developmental trajectories. Overall, the research reviewed in this paper may contribute to designing interventions aimed at positively influencing the development of self-esteem.

Acknowledgment

This research was supported by Swiss National Science Foundation Grant PP00P1-123370 to Ulrich Orth, and National Institute on Drug Abuse Grant DA017902 to Richard W. Robins.

Notes

<sup>1</sup> Address correspondence to Ulrich Orth, Department of Psychology, University of Bern, Fabrikstrasse 8, 3012 Bern, Switzerland. E-mail: [ulrich.orth@psy.unibe.ch](mailto:ulrich.orth@psy.unibe.ch).

## References

- Ackerman, R. A., Witt, E. A., Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., & Kashy, D. A. (2011). What does the Narcissistic Personality Inventory really measure? *Assessment, 18*, 67-87.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest, 4*, 1-44.
- Birkeland, M. S., Melkevik, O., Holsen, I., & Wold, B. (2012). Trajectories of global self-esteem development during adolescence. *Journal of Adolescence, 35*, 43-54.
- Boden, J. M., Fergusson, D. M., & Horwood, L. J. (2007). Self-esteem and violence: Testing links between adolescent self-esteem and later hostility and violent behavior. *Social Psychiatry and Psychiatric Epidemiology, 42*, 881-891.
- Boden, J. M., Fergusson, D. M., & Horwood, L. J. (2008). Does adolescent self-esteem predict later life outcomes? A test of the causal role of self-esteem. *Development and Psychopathology, 20*, 319-339.
- Chung, J. M., Robins, R. W., Trzesniewski, K. H., Nofhle, E. E., Roberts, B. W., & Widaman, K. F. (2014). Continuity and change in self-esteem during emerging adulthood. *Journal of Personality and Social Psychology, 106*, 469-483.
- Cole, D. A., Maxwell, S. E., Martin, J. M., Peeke, L. G., Seroczynski, A. D., Tram, J. M., . . . Maschman, T. (2001). The development of multiple domains of child and adolescent self-concept: a cohort sequential longitudinal design. *Child Development, 72*, 1723-1746.
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review, 108*, 593-623.



- Donnellan, M. B., Kenny, D. A., Trzesniewski, K. H., Lucas, R. E., & Conger, R. D. (2012). Using trait-state models to evaluate the longitudinal consistency of global self-esteem from adolescence to adulthood. *Journal of Research in Personality, 46*, 634-645.
- Donnellan, M. B., Trzesniewski, K. H., & Robins, R. W. (2011). Self-esteem: Enduring issues and controversies. In T. Chamorro-Premuzic, S. von Stumm & A. Furnham (Eds.), *The Wiley-Blackwell handbook of individual differences* (pp. 718-746). Chichester, UK: Wiley-Blackwell.
- Erol, R. Y., & Orth, U. (2011). Self-esteem development from age 14 to 30 years: A longitudinal study. *Journal of Personality and Social Psychology, 101*, 607-619.
- Erol, R. Y., & Orth, U. (2014). *Development of self-esteem and relationship satisfaction in couples: Two longitudinal studies*. Manuscript submitted for publication.
- Fraley, R. C., & Roberts, B. W. (2005). Patterns of continuity: A dynamic model for conceptualizing the stability of individual differences in psychological constructs across the life course. *Psychological Review, 112*, 60-74.
- Gentile, B., Twenge, J. M., & Campbell, W. K. (2010). Birth cohort differences in self-esteem, 1988-2008: A cross-temporal meta-analysis. *Review of General Psychology, 14*, 261-268.
- Huang, C. (2010). Mean-level change in self-esteem from childhood through adulthood: Meta-analysis of longitudinal studies. *Review of General Psychology, 14*, 251-260.
- Kuster, F., & Orth, U. (2013). The long-term stability of self-esteem: Its time-dependent decay and nonzero asymptote. *Personality and Social Psychology Bulletin, 39*, 677-690.
- Kuster, F., Orth, U., & Meier, L. L. (2013). High self-esteem prospectively predicts better work conditions and outcomes. *Social Psychological and Personality Science, 4*, 668-675.

Kuzucu, Y., Bontempo, D. E., Hofer, S. M., Stallings, M. C., & Piccinin, A. M. (2013).

Developmental change and time-specific variation in global and specific aspects of self-concept in adolescence and association with depressive symptoms. *Journal of Early Adolescence*.

Leary, M. R. (2012). Sociometer theory. In P. A. M. Van Lange, A. W. Kruglanski & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 141-159). Thousand Oaks, CA: Sage.

Luhmann, M., Orth, U., Specht, J., Kandler, C., & Lucas, R. E. (in press). Studying changes in life circumstances and personality: It's about time. *European Journal of Personality*.

MacDonald, G., & Leary, M. R. (2012). Individual differences in self-esteem. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 354-377). New York, NY: Guilford.

Marshall, S. L., Parker, P. D., Ciarrochi, J., & Heaven, P. C. L. (2014). Is self-esteem a cause or consequence of social support? A 4-year longitudinal study. *Child Development, 85*, 1275-1291.

Meier, L. L., Orth, U., Denissen, J. J. A., & Kühnel, A. (2011). Age differences in instability, contingency, and level of self-esteem across the life span. *Journal of Research in Personality, 45*, 604-612.

Morin, A. J. S., Maiano, C., Marsh, H. W., Nagengast, B., & Janosz, M. (2013). School life and adolescents' self-esteem trajectories. *Child Development, 84*, 1967-1988.

Orth, U., Robins, R. W., Trzesniewski, K. H., Maes, J., & Schmitt, M. (2009). Low self-esteem is a risk factor for depressive symptoms from young adulthood to old age. *Journal of Abnormal Psychology, 118*, 472-478.

- Orth, U., Robins, R. W., & Widaman, K. F. (2012). Life-span development of self-esteem and its effects on important life outcomes. *Journal of Personality and Social Psychology, 102*, 1271-1288.
- Orth, U., Trzesniewski, K. H., & Robins, R. W. (2010). Self-esteem development from young adulthood to old age: A cohort-sequential longitudinal study. *Journal of Personality and Social Psychology, 98*, 645-658.
- Robins, R. W., Trzesniewski, K. H., Tracy, J. L., Gosling, S. D., & Potter, J. (2002). Global self-esteem across the life span. *Psychology and Aging, 17*, 423-434.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Shaw, B. A., Liang, J., & Krause, N. (2010). Age and race differences in the trajectory of self-esteem. *Psychology and Aging, 25*, 84-94.
- Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin, 139*, 213-240.
- Steiger, A. E., Allemand, M., Robins, R. W., & Fend, H. A. (2014). Low and decreasing self-esteem during adolescence predict adult depression two decades later. *Journal of Personality and Social Psychology, 106*, 325-338.
- Swann, W. B., Chang-Schneider, C., & McClarty, K. L. (2007). Do people's self-views matter? *American Psychologist, 62*, 84-94.
- Trzesniewski, K. H., Donnellan, M. B., Moffitt, T. E., Robins, R. W., Poulton, R., & Caspi, A. (2006). Low self-esteem during adolescence predicts poor health, criminal behavior, and limited economic prospects during adulthood. *Developmental Psychology, 42*, 381-390.

- Twenge, J. M. (2006). *Generation Me: Why today's young Americans are more confident, assertive, entitled – and more miserable than ever before*. New York: Free Press.
- Wagner, J., Gerstorf, D., Hoppmann, C., & Luszcz, M. A. (2013). The nature and correlates of self-esteem trajectories in late life. *Journal of Personality and Social Psychology, 105*, 139-153.
- Wagner, J., Lang, F. R., Neyer, F. J., & Wagner, G. G. (2014). Self-esteem across adulthood: The role of resources. *European Journal of Ageing, 11*, 109-119.
- Wagner, J., Lüdtke, O., Jonkmann, K., & Trautwein, U. (2013). Cherish yourself: Longitudinal patterns and conditions of self-esteem change in the transition to young adulthood. *Journal of Personality and Social Psychology, 104*, 148-163.
- Wylie, R. C. (1979). *The self-concept*. Lincoln, NE: University of Nebraska Press.
- Zeiders, K. H., Umaña-Taylor, A. J., & Derlan, C. L. (2013). Trajectories of depressive symptoms and self-esteem in Latino youths: Examining the role of gender and perceived discrimination. *Developmental Psychology, 49*, 951-963.

## Recommended Reading

- Kuster, F., & Orth, U. (2013). (See References). A 29-year longitudinal study suggesting that the longterm stability of individual differences in self-esteem is relatively large and that self-esteem is a trait-like personality construct.
- Orth, U., Robins, R. W., & Widaman, K. F. (2012). (See References). A longitudinal study on the lifespan trajectory of self-esteem and on its effects on success and well-being in important life domains.
- Orth, U., Trzesniewski, K. H., & Robins, R. W. (2010). (See References). A longitudinal study with a nationally representative sample, indicating that self-esteem increases from young adulthood to about age 60 years and then decreases into old age.
- Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2013). Development of self-esteem. In V. Zeigler-Hill (Ed.), *Self-esteem* (pp. 60-79). London: Psychology Press. A review of theory and research on self-esteem development and on mechanisms that promote continuity and change in self-esteem.
- Wagner, J., Gerstorf, D., Hoppmann, C., & Luszcz, M. A. (2013). (See References). A longitudinal study on the self-esteem trajectory in old age, suggesting that low cognitive abilities contribute to declining self-esteem at the end of life.