Understanding the Link Between Low Self-Esteem and Depression

Ulrich Orth and Richard W. Robins

Current Directions in Psychological Science 2013 22: 455
DOI: 10.1177/0963721413492763

aps ASSOCIATION FOR PSYCHOLOGICAL SCIENCE

Current Directions in Psychological Science
22(6) 455–460

DOI: 10.1177/0963721413492763
cdps.sagepub.com
SAGE

Understanding the Link Between Low Self-Esteem and Depression

Ulrich Orth[1] and Richard W. Robins[2]
[1]University of Basel and [2]University of California, Davis

Abstract
Although it is well documented that low self-esteem and depression are related, the precise nature of the relation has been a topic of ongoing debate. We describe several theoretical models concerning the link between self-esteem and depression, and review recent research evaluating the validity of these competing models. Overall, the available evidence provides strong support for the vulnerability model (low self-esteem contributes to depression), weaker support for the scar model (depression erodes self-esteem), and little support for alternative accounts such as the diathesis-stress model. Moreover, the vulnerability model is robust and holds across gender, age, affective-cognitive versus somatic symptoms of depression, European background versus Mexican-origin participants, and clinical versus nonclinical samples. Research on further specifications of the vulnerability model suggests that the effect is (a) partially mediated by rumination, (b) not influenced by other characteristics of self-esteem (i.e., stability and contingency), and (c) driven predominantly by global rather than domain-specific self-esteem. The research has important theoretical implications because it counters the commonly repeated claim that self-esteem has no long-term impact. Moreover, the research has important practical implications, suggesting that depression can be prevented, or reduced, by interventions that improve self-esteem.

Keywords
self-esteem, depression, vulnerability model, longitudinal

Everyday experience suggests that people who have low self-esteem are more likely to feel sad, lonely, and dejected. Correspondingly, many theories of depression posit that self-esteem plays a central role in the etiology of depressive disorders (e.g., Abramson, Seligman, & Teasdale, 1978; Beck, 1967), and operational definitions of depression include low self-esteem as a possible symptom (American Psychiatric Association, 2000). For decades, we have known that self-esteem and depression are empirically related: People with low self-esteem are more prone to depression, both clinical levels and milder forms of depressed affect, and depressed people are more likely to feel worthless, incompetent, and inadequate. However, the precise nature of this relation has been a topic of continuing debate (Orth, Robins, & Roberts, 2008; Roberts & Monroe, 1999; Zeigler-Hill, 2011). Over the past several years, an emerging body of longitudinal studies, often based on large samples, have provided new insights into why and how low self-esteem is related to depression. As we review in this article, these studies suggest that low self-esteem is not only a correlate but also a vulnerability factor for depression. Identifying such factors is critically important, because depression can lead to severe personal consequences as a result of impaired functioning in the relationship, work, and health domains (Gotlib & Hammen, 2009), and it is projected to be the leading cause of the global burden of disease by the year 2030 (World Health Organization, 2008).

Before we describe the current state of knowledge on the relation between self-esteem and depression, we briefly define each construct. Self-esteem refers to an individual's subjective evaluation of his or her worth as a person. Despite occasional short-term fluctuations, self-esteem is a relatively stable characteristic of individuals across the life span (Trzesniewski, Donnellan, & Robins, 2003). Depression involves a set of interrelated affective,

Corresponding Author:
Ulrich Orth, Department of Psychology, University of Basel, Missionsstrasse 62, 4055 Basel, Switzerland
E-mail: ulrich.orth@unibas.ch

cognitive, and physiological symptoms, including sadness, inability to experience pleasure, hopelessness, poor concentration, and disordered sleep. In this article, we use the term *depression* to denote a continuous variable (i.e., individual differences in depressive symptoms) rather than a clinical category (i.e., major depressive disorder) because previous research suggests that depression is best conceptualized as a continuous construct (e.g., Hankin, Fraley, Lahey, & Waldman, 2005).

Competing Theoretical Models and Empirical Evidence

Several theoretical models have been proposed to explain why low self-esteem is associated with depression. The *vulnerability model* (Fig. 1A) states that low self-esteem is a causal risk factor for depression. For example, according to Beck's (1967) cognitive theory of depression, negative beliefs about the self are not just a symptom of depression but play a critical causal role in its etiology (see also Metalsky, Joiner, Hardin, & Abramson, 1993). In the vulnerability model, low self-esteem is conceptualized as a stable personality factor that predisposes the person to experience depression; the link between predisposition and outcome can be mediated or moderated by other variables (Klein, Kotov, & Bufferd, 2011).

The *scar model* (Fig. 1B) proposes that low self-esteem is a consequence, rather than a cause, of depression. Specifically, depression is assumed to persistently deteriorate self-esteem, even after remittance of a depressive episode; that is, experiences of depression may leave "scars" in the individual's self-concept that progressively erode self-esteem over time (see Coyne, Gallo, Klinkman, & Calarco, 1998; Shahar & Davidson, 2003). It is noteworthy that the vulnerability model and scar model are not mutually exclusive because both processes (i.e., low self-esteem contributing to depression and depression eroding self-esteem) might operate simultaneously, corresponding to the *reciprocal relation model* (Fig. 1C).

The vulnerability, scar, and reciprocal relation models have been tested in a number of recent longitudinal studies, many of which used large samples and advanced statistical approaches (such as latent variable modeling), thereby increasing the validity of the conclusions (e.g., Orth et al., 2008; Orth, Robins, Trzesniewski, Maes, & Schmitt, 2009; Shahar & Henrich, 2010). Most of the studies are based on cross-lagged regression models—the most common way to establish the prospective effect of one variable on another. The results consistently supported the vulnerability model and provided weak support for the scar model. Moreover, a meta-analysis of 77 longitudinal studies (including approximately 35,000 participants) indicated that the vulnerability and scar effects are both statistically significant, but the vulnerability effect is twice as large as the scar effect (Sowislo & Orth, 2013).

Evidence suggests that the vulnerability effect is robust and holds across a wide range of samples and study designs. For example, the vulnerability model holds for both men and women (Orth et al., 2008; Orth, Robins, Trzesniewski, et al., 2009; Sowislo & Orth, 2013). Thus, although men and women differ in their average levels of self-esteem and depression, the relation between self-esteem and depression does not vary by gender. Likewise, the vulnerability effect holds across all age groups from childhood to old age (Orth, Robins, Trzesniewski, et al., 2009; Sowislo & Orth, 2013), for affective-cognitive and somatic symptoms of depression (Kuster, Orth, & Meier, 2012; Orth, Robins, Trzesniewski, et al., 2009), for different measures of self-esteem and depression (Sowislo & Orth, 2013), after controlling for content overlap between self-esteem and depression scales (Orth et al., 2008; Orth, Robins, Trzesniewski, et al., 2009), and across time intervals ranging from a few weeks to more than a decade (Sowislo & Orth, 2013; Steiger, Allemand, Robins, & Fend, 2012). In addition, the vulnerability effect holds in a sample of Mexican-origin participants, including those born in Mexico as well as in the United States (Orth, Robins, Widaman, & Conger, in press). It is noteworthy that low self-esteem predicts clinically diagnosed depression (Ormel, Oldehinkel, & Vollebergh, 2004; Trzesniewski et al., 2006), and the vulnerability model holds in clinical and nonclinical samples (Sowislo & Orth, 2013).

A crucial question is whether low self-esteem actually exerts a causal influence on depression, or whether both variables are caused by the same underlying factors. Thus, low self-esteem might merely be an early manifestation of depression, as assumed by the *precursor model* (Fig. 1D). For example, it is possible that stressful events, such as a breakup of a close relationship, academic failure, being victimized, and losing one's job, have an immediately damaging effect on self-esteem and a more slowly operating effect on depression. Then, researchers might observe a predictive effect of low self-esteem on depression, and—if the true causal factor is not included in the model—mistakenly interpret the pattern of results as evidence for the vulnerability model. Using data from three independent studies (one of which included a large national probability sample), Orth, Robins, and Meier (2009) found that the vulnerability effect of low self-esteem held when controlling for the effects of stressful life events and daily hassles. Likewise, in a study with a large community sample of Mexican-origin adolescents, the vulnerability effect held when controlling for third variables such as relational victimization, maternal depression, and low social support, as well as stressful life events (Orth et al., in press). Finally, neuroticism—the tendency to frequently experience negative feelings, to

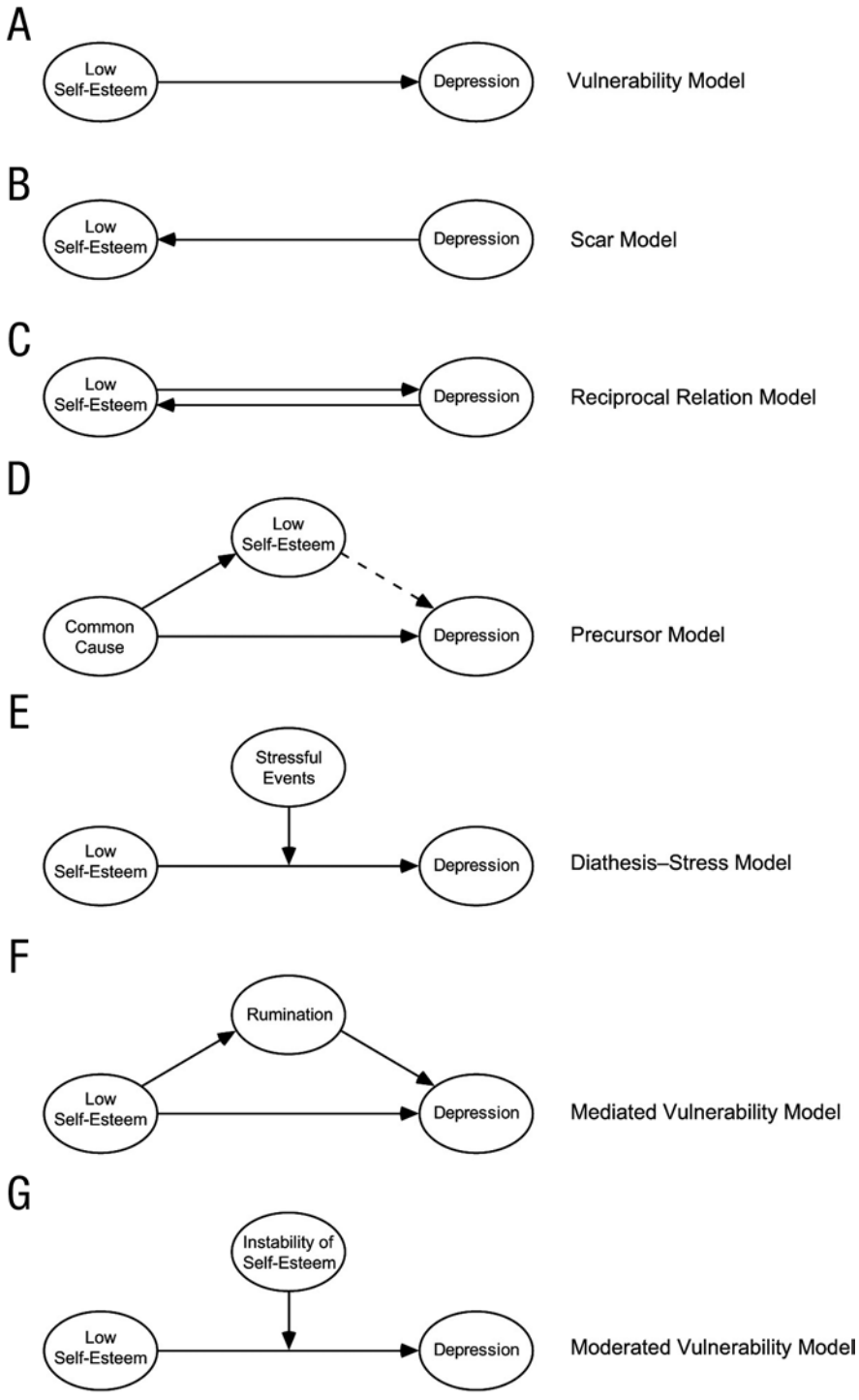

Fig. 1. Models of the relation between low self-esteem and depression. Of the alternative models (A to E), only the vulnerability model ("low self-esteem contributes to depression," A) has received strong and robust empirical support. Of the refined vulnerability models (F and G), the mediated vulnerability model ("rumination mediates the effect of low self-esteem on depression") has been supported by research but the moderated vulnerability model has not.

worry, and to be emotionally unstable—might influence both self-esteem and depression, creating a spurious link between the two (Hankin, Lakdawalla, Carter, Abela, & Adams, 2007; Watson, Suls, & Haig, 2002). However, in a recent study that tested this hypothesis, the vulnerability effect held when controlling for the Big Five personality

traits, including neuroticism (Sowislo, Orth, & Meier, 2012). Thus, the available evidence does not support the claim that low self-esteem is merely a precursor of depression; nevertheless, research should continue to test this possibility in other samples and contexts.

Another plausible model of the relation between low self-esteem and depression is the *diathesis-stress model* (Fig. 1E). Here, low self-esteem is thought of as a diathesis—that is, a predisposing factor that exerts causal influence only if the person simultaneously experiences life stress (Hammen, 2005; Metalsky et al., 1993). In the face of challenging life circumstances, people with low self-esteem may have fewer coping resources and consequently be more prone to spiraling downward into depression. This model predicts an interaction between low self-esteem and stress, with risk for depression emerging only when both conditions are present. Orth, Robins, and Meier (2009) reviewed the available evidence and found that most studies did not show supporting evidence. Moreover, in three new longitudinal studies, one of which had sufficient power to detect even a very small interaction effect, low self-esteem did not interact with stressful life events (e.g., criminal victimization) or everyday stressors in the prediction of depression (Orth, Robins, & Meier, 2009). However, because interaction effects are often subtle and difficult to detect, it might be premature to dismiss the diathesis–stress model of low self-esteem and depression.

Tests of Refined Specifications of the Vulnerability Model

Given the robust evidence supporting the vulnerability model, the next step is to examine more refined specifications of the model. For example, which mediating mechanisms might account for the effect (Fig. 1F)? Only one study has tested for mediation, and it found that the tendency to ruminate about difficult life experiences mediated the prospective effect of low self-esteem on depression across several waves of data (Kuster et al., 2012). However, given that rumination only partially mediated the effect, it is likely that further processes are involved. For example, a possible interpersonal pathway is that low self-esteem leads to social avoidance and withdrawal, which has been linked to depression (Ottenbreit & Dobson, 2004). In addition, in contrast to people with high self-esteem, those with low self-esteem tend to dampen positive affect and feel undeserving of positive outcomes, which may contribute to the development of depression (Wood, Heimpel, Manwell, & Whittington, 2009; Wood, Heimpel, & Michela, 2003). Knowledge about mediating processes that account for the vulnerability effect is critical because it informs possible starting points for interventions aimed at preventing or reducing depression.

In addition, it is possible that other characteristics of self-esteem besides its level (i.e., low vs. high) are vulnerability factors for depression or moderate the effect of low self-esteem on depression (Fig. 1G). In particular, the degree to which self-esteem is unstable over short periods of time and contingent on external feedback might be influential (Kernis et al., 1998; Roberts & Gotlib, 1997). Most previous studies examining these hypotheses used small samples and consequently suffered from low power. A recent project used data from two large longitudinal studies to test the independent and interactive effects of level, stability, and contingency in one overarching model (Sowislo et al., 2012). In both studies, only self-esteem level, but not stability and contingency, predicted subsequent depression. Neither stability nor contingency moderated the effect of self-esteem level. Thus, the available evidence suggests that low self-esteem, but not unstable or contingent self-esteem, is a vulnerability factor for depression.

Previous research on the vulnerability model has focused almost exclusively on global self-esteem. However, perceiving oneself negatively in specific domains, such as academic competence, social skills, and physical attractiveness, might also contribute to depression. Knowledge about which domains of self-esteem contribute to the vulnerability effect is important for theoretical reasons, to help us understand why and for whom low self-esteem is a risk factor for depression. In addition, such knowledge could facilitate the design of interventions that target the particular domain of self-evaluation that has the most toxic effect on depression. In a recent study, we took a first step toward determining the degree to which global versus domain-specific measures of self-esteem prospectively predict depression, and we found that the vulnerability effect was driven, for the most part, by global self-esteem; the only domain-specific self-evaluation that prospectively predicted depression was honesty–trustworthiness (Orth et al., in press).

Future Directions and Implications

Although research on the link between low self-esteem and depression has made great progress recently, several aspects of the relation remain insufficiently understood. First, future research should continue to examine the intrapersonal and interpersonal mechanisms that account for the vulnerability effect. Second, most previous longitudinal studies examined effects across long periods of time, such as years. However, to fully understand the process, it is important to determine whether the vulnerability effect unfolds slowly over years or the processes linking self-esteem and depression play out over shorter periods (e.g., in reaction to specific situational experiences, such as being criticized by one's peers or

relationship partner). Therefore, future research should analyze the dynamic relations between self-esteem and depression on a day-to-day level. Third, previous research had been based predominantly on participants of European origin (Sowislo & Orth, 2013). Future research should therefore examine samples from more diverse cultural contexts, particularly collectivistic cultures. There are theoretical reasons to believe that in individualistic cultures, self-esteem might be more central to psychological adjustment because of the emphasis placed on feeling good about one's own accomplishments; in collectivistic cultures, feelings about how one's accomplishments reflect on one's family and community might be more critical (Kwan, Bond, & Singelis, 1997). Consequently, it is possible that the vulnerability effect does not hold in collectivistic cultural contexts. Finally, the presumed causal effect of self-esteem on depression should be tested more directly using alternative research designs. For example, intervention studies could test whether increasing self-esteem via an intervention leads to a decrease in risk for depression.

The research reviewed in this article has important theoretical implications because it counters the notion that self-esteem is an empty construct that has no long-term impact and is largely redundant with other measures of adjustment, such as depression (for review of the debate about the benefits of self-esteem, see, e.g., Baumeister, Campbell, Krueger, & Vohs, 2003; Orth, Robins, & Widaman, 2012; Swann, Chang-Schneider, & McClarty, 2007). Moreover, the research has important practical implications, suggesting that depression can be prevented, or reduced, by improving self-esteem. It is noteworthy that meta-analytic reviews suggest that it is possible to increase self-esteem by psychological interventions (e.g., O'Mara, Marsh, Craven, & Debus, 2006). It is our hope that, ultimately, the findings of the growing body of research on the link between low self-esteem and depression might contribute to designing effective interventions aimed at reducing the burden of depression.

Recommended Reading

Orth, U., Robins, R. W., & Roberts, B. W. (2008). (See References). A study testing the vulnerability and scar models in adolescents and young adults, controlling for content overlap between self-esteem and depression scales.

Orth, U., Robins, R. W., Trzesniewski, K. H., Maes, J., & Schmitt, M. (2009). (See References). A study, using data from two large longitudinal studies, suggesting that low self-esteem is a risk factor for depression at all phases of the adult life span.

Sowislo, J. F., & Orth, U. (2013). (See References). A review of the topic and a meta-analysis of the available longitudinal studies, indicating that the vulnerability model holds across sample and design characteristics.

Zeigler-Hill, V. (2011). (See References). A review of theory and research on the relation between self-esteem and psychopathologic conditions, and on the role of self-esteem in psychotherapy.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Funding

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

References

Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, *87*, 49–74.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.

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.

Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. New York, NY: Harper & Row.

Coyne, J. C., Gallo, S. M., Klinkman, M. S., & Calarco, M. M. (1998). Effects of recent and past major depression and distress on self-concept and coping. *Journal of Abnormal Psychology*, *107*, 86–96.

Gotlib, I. H., & Hammen, C. L. (Eds.). (2009). *Handbook of depression*. New York, NY: Guilford.

Hammen, C. (2005). Stress and depression. *Annual Review of Clinical Psychology*, *1*, 293–319.

Hankin, B. L., Fraley, R. C., Lahey, B. B., & Waldman, I. D. (2005). Is depression best viewed as a continuum or discrete category? A taxometric analysis of childhood and adolescent depression in a population-based sample. *Journal of Abnormal Psychology*, *114*, 96–110.

Hankin, B. L., Lakdawalla, Z., Carter, I. L., Abela, J. R. Z., & Adams, P. (2007). Are neuroticism, cognitive vulnerabilities and self-esteem overlapping or distinct risks for depression? Evidence from exploratory and confirmatory factor analyses. *Journal of Social & Clinical Psychology*, *26*, 29–63.

Kernis, M. H., Whisenhunt, C. R., Waschull, S. B., Greenier, K. D., Berry, A. J., Herlocker, C. E., & Anderson, C. A. (1998). Multiple facets of self-esteem and their relations to depressive symptoms. *Personality and Social Psychology Bulletin*, *24*, 657–668.

Klein, D. N., Kotov, R., & Bufferd, S. J. (2011). Personality and depression: Explanatory models and review of the evidence. *Annual Review of Clinical Psychology*, *7*, 269–295.

Kuster, F., Orth, U., & Meier, L. L. (2012). Rumination mediates the prospective effect of low self-esteem on depression: A five-wave longitudinal study. *Personality and Social Psychology Bulletin*, *38*, 747–759.

Kwan, V. S. Y., Bond, M. H., & Singelis, T. M. (1997). Pancultural explanations for life satisfaction: Adding relationship harmony to self-esteem. *Journal of Personality and Social Psychology*, *73*, 1038–1051.

Metalsky, G. I., Joiner, T. E., Hardin, T. S., & Abramson, L. Y. (1993). Depressive reactions to failure in a naturalistic setting: A test of the hopelessness and self-esteem theories of depression. *Journal of Abnormal Psychology*, *102*, 101–109.

O'Mara, A. J., Marsh, H. W., Craven, R. G., & Debus, R. L. (2006). Do self-concept interventions make a difference? A synergistic blend of construct validation and meta-analysis. *Educational Psychologist*, *41*, 181–206.

Ormel, J., Oldehinkel, A.J., & Vollebergh, W. (2004). Vulnerability before, during, and after a major depressive episode. *Archives of General Psychiatry*, *61*, 990–996.

Orth, U., Robins, R. W., & Meier, L. L. (2009). Disentangling the effects of low self-esteem and stressful events on depression: Findings from three longitudinal studies. *Journal of Personality and Social Psychology*, *97*, 307–321.

Orth, U., Robins, R. W., & Roberts, B. W. (2008). Low self-esteem prospectively predicts depression in adolescence and young adulthood. *Journal of Personality and Social Psychology*, *95*, 695–708.

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., Robins, R. W., Widaman, K. F., & Conger, R. D. (in press). Is low self-esteem a risk factor for depression? Findings from a longitudinal study of Mexican-origin youth. *Developmental Psychology*.

Ottenbreit, N. D., & Dobson, K. S. (2004). Avoidance and depression: The construction of the Cognitive-Behavioral Avoidance Scale. *Behaviour Research and Therapy*, *42*, 293–313.

Roberts, J. E., & Gotlib, I. H. (1997). Temporal variability in global self-esteem and specific self-evaluation as prospective predictors of emotional distress: Specificity in predictors and outcome. *Journal of Abnormal Psychology*, *106*, 521–529.

Roberts, J. E., & Monroe, S. M. (1999). Vulnerable self-esteem and social processes in depression: Toward an interpersonal model of self-esteem regulation. In T. Joiner & J. C. Coyne (Eds.), *The interactional nature of depression: Advances in interpersonal approaches* (pp. 149–187). Washington, DC: American Psychological Association.

Shahar, G., & Davidson, L. (2003). Depressive symptoms erode self-esteem in severe mental illness: A three-wave, cross-lagged study. *Journal of Consulting and Clinical Psychology*, *71*, 890–900.

Shahar, G., & Henrich, C. C. (2010). Do depressive symptoms erode self-esteem in early adolescence? *Self and Identity*, *9*, 403–415.

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.

Sowislo, J. F., Orth, U., & Meier, L. L. (2012). *Comparing the effects of low, unstable, and contingent self-esteem on depression: Two longitudinal studies*. Manuscript submitted for publication.

Steiger, A. E., Allemand, M., Robins, R. W., & Fend, H. A. (2012). *Low and decreasing self-esteem during adolescence predicts adult depression two decades later*. Manuscript submitted for publication.

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.

Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2003). Stability of self-esteem across the life span. *Journal of Personality and Social Psychology*, *84*, 205–220.

Watson, D., Suls, J., & Haig, J. (2002). Global self-esteem in relation to structural models of personality and affectivity. *Journal of Personality and Social Psychology*, *83*, 185–197.

Wood, J. V., Heimpel, S. A., Manwell, L. A., & Whittington, E. J. (2009). This mood is familiar and I don't deserve to feel better anyway: Mechanisms underlying self-esteem differences in motivation to repair sad moods. *Journal of Personality and Social Psychology*, *96*, 363–380.

Wood, J. V., Heimpel, S. A., & Michela, J. L. (2003). Savoring versus dampening: Self-esteem differences in regulating positive affect. *Journal of Personality and Social Psychology*, *85*, 566–580.

World Health Organization. (2008). *The global burden of disease: 2004 update*. Geneva, Switzerland: Author.

Zeigler-Hill, V. (2011). The connections between self-esteem and psychopathology. *Journal of Contemporary Psychotherapy*, *41*, 157–164.