

# Adolescent Depression

## Stressful Interpersonal Contexts and Risk for Recurrence

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**ABSTRACT**—*High rates of diagnosable depression in adolescence, especially among young women, present challenging clinical and research issues. Depression not only portends current maladjustment but may also signal risk for recurrent or chronic depression and its associated impairment. Because depression is most often a response to stressful events and circumstances, it is important to understand the stress context itself. Individuals with depression histories are known to contribute to the occurrence of interpersonal and other stressors at a high rate, and for young women particularly, the occurrence of interpersonal stressors and conditions in turn predicts recurrences of depression, in a vicious cycle. Interpersonal dysfunction in early adolescence predicts the likelihood of continuing maladaptive functioning in peer, family, romantic, and parenting roles. The transmission of depression from one generation to the next involves not only heritable factors but also the likelihood that depressed youth become caught in life contexts of marital and parenting discord that portend dysfunction for their offspring and continuing depression for themselves.*

**KEYWORDS**—*adolescent; depression; stress; gender differences; stress generation*

Adolescent depression is a captivating topic for several reasons. Rates of youth depression are the highest of all psychological disorders in this age group; the disorder affects millions of youngsters and their families. Depression is impairing and is associated with many problems, such as school difficulties and drop out, unwanted pregnancies, health problems, drug and alcohol abuse and smoking, intimate partner violence, and problematic peer and family relationships, as well as anxiety, eating, and disruptive-behavior disorders. Tragically, it can also be fatal due to its association with suicide. In addition to the challenges of its immediate clinical and social consequences,

researchers are intrigued by the emergence of gender differences in rates of depression in adolescence, matching the 2:1 ratios of female to male depression observed in adulthood.

There is an enormous literature on adolescent depression that covers clinical and treatment findings, sociodemographic issues, and etiological perspectives. The focus of work reported in the current article is on the role of stress, and especially interpersonal stress. The developmental task for adolescents is the creation of their individual identities and initiation of the roles that affect the rest of their lives. However, for many depressed adolescents, perhaps especially girls, the lives they create are dysfunctional and entrapping and may portend a vicious cycle of recurring depression and stress. The work that I highlight is unique in its focus on the context of the lives of youth and the mutual influence between stress and depression, the focus on interpersonal stress and functioning, the longitudinal course of depression in young people, and the intergenerational transmission of depression and stress.

### INTERPERSONAL STRESS AND DEPRESSION

Depression is heterogeneous in its manifestations and clinical course, and more than likely there are multiple etiological pathways and possibly different forms of the disorder. A common element, however, is that depression is usually framed within a *diathesis-stress* perspective: Stressful life events and chronically stressful circumstances are typically the triggers of depression. However, most youngsters experience stressors and do not become depressed. Thus, much of research in the field attempts to identify three broad realms of diatheses: cognitive vulnerabilities that adversely affect the ways in which negative events are construed with respect to personal meaning and self-worth; biological vulnerabilities such as the neuroendocrine, hormonal, and genetic mechanisms by which stress responses result in depressive reactions; and the personal and interpersonal characteristics that modify the nature and adequacy of resources for coping with adversity. Although my work covers many of these topics, we focus particularly on the quality of social relationships and their impact on depression.

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Any negative event or circumstance that an individual believes will result in a depletion of his or her sense of being worthwhile, desirable, competent, or successful could trigger a depressive reaction in a vulnerable person. However, from Freud and Bowlby to empirical epidemiological research, lost or disrupted close relationships appear to have particular relevance to depression, possibly owing to the fundamental biology of the human species and survival benefits of attachment. Our research and that of colleagues commonly finds that negative events with interpersonal content are particularly over-represented in depression; stressors in close relationships and social networks are especially predictive of depression for girls. For example, in our large ( $n = 815$ ) longitudinal study of an Australian community sample of adolescents with depressed or nondepressed mothers, studied at ages 15 and 20, 15-year-old girls reported both higher rates of acute interpersonal stressors and chronic problems with romantic and close-friend relationships than boys did. Girls were also more reactive to stress; at similar levels of interpersonal life stress, girls showed significantly higher levels of depression than boys did (Shih, Eberhart, Hammen, & Brennan, 2006). Rudolph (2002) and others argue that in adolescence, gender differences in affiliative needs become highly salient and render girls emotionally susceptible to pressures for popularity and acceptance by peers and potential romantic partners. Thus, one aspect of the emergence of gender differences in adolescence may be girls' double danger of both greater exposure to and reactivity in response to social stressors.

Interpersonal stressful events and circumstances trigger depressive episodes in adolescent girls; also, low peer and parent support represent stable risk factors that continue after the episode resolves—presumably creating vulnerability for recurrence of depression (Beevers, Rohde, Stice, & Nolen-Hoeksema, 2007). In the Australian longitudinal community study of youth, chronic interpersonal difficulties in peer, romantic, and family relationships at age 15 were significantly higher among youth who had both early onset (by 15) and recurrent major depression. Also the association between maternal depression and youth depression by age 20 was entirely mediated for girls, but not for boys, by interpersonal difficulties at 15 (Hammen, Brennan, & Keenan-Miller, 2008). In contrast, youth who had had a depressive disorder by 15 but did not have chronic interpersonal difficulties experienced no further diagnosable depression during the 5-year follow-up. While many episodes of adolescent depression may reflect transitory turmoil or life challenges that do not portend continuing disorder, rates of recurrence over 2 to 5 years of about 60% among those treated for depression (e.g., Weissman et al., 1999) and of around 40% among depressed community youth (Lewinsohn, Rohde, Seeley, Klein, & Gotlib, 2000) have been reported. Thus, interpersonal maladjustment among youth with histories of depression may be a flag for identifying those at particular risk for continuing depression and in need of treatment. Interpersonal maladjustment, as discussed

in the present article, is a general term for problematic and stressful relationships, but its origins and manifestations require further elaboration and characterization. Some youth may be socially isolated, others rejected and shunned; some may have reasonably adequate social acceptance but poor relations with parents or specific problems such as excessive dependency in romantic relationships.

### STRESS GENERATION AND THE CREATION OF STRESSFUL CONTEXTS IN ADOLESCENCE

The link between stress and depression is not a one-way street in which stress triggers depression. Based on research with adult depressed women (Hammen, 1991), my colleagues and I coined the term “stress generation” to refer to the pattern in which individuals seem to contribute to the occurrence of stressors in their lives. The depressed women had significantly higher rates of events that the scoring protocol deemed “at least partly dependent on the person’s characteristics and behaviors”—in contrast to independent (“fateful”) events outside the control of the individual. Specifically, these dependent events tended to have interpersonal content, with notably high rates of events with a theme of conflict with others. Such events may occur in part because of the debilitating symptoms of depression, but mostly they occurred when the person was not in a depressive episode, suggesting that something else contributed to the excess of events. Individuals who have greater exposure to stress are likely to experience further depression. Thus, an implication of stress generation is recurrence or chronicity of depression. Among depressed and formerly depressed (compared to never-depressed) participants, this pattern of stress generation associated with further depression has been replicated in many studies, including in adolescent women.

The idea that individuals contribute to the occurrence of negative life events can be expanded to the idea of creation of life contexts. This is not a new idea (e.g., see Buss, 1987), but it takes on unique meaning in the framework of clinically significant disorders. The formation of a romantic relationship and the establishment of a family are two key domains in which life contexts are created; such contexts are, for better or worse, likely to affect every aspect of one’s life for many years. Research with depressed adults, for example, consistently shows that depression is associated with marital discord and parenting problems. Our studies indicate that difficulties in peer relations during adolescence are also problematic and associated with depression, with significantly higher levels of peer stress and greater depressive reactions among girls compared to among boys (Shih et al., 2006). However, we focus here on romantic and parenting relations, as these have implications for the transmission of depression across generations and for depression’s potential chronicity and recurrence.

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### Romantic Relationship Difficulties

Research on adult depression indicates several patterns: bidirectional effects between marital discord and depression; worse problems with marital dissatisfaction among those with depressive compared to nondepressive disorders; and depressed women being more likely to have mates with depression or antisocial or substance-use disorders than to have no disorders (see Hammen & Watkins, 2008, for a review of these topics).

How do these findings relate to adolescent depression? We conducted a 5-year longitudinal study of high-school women in their senior year in Los Angeles and found that there were significant associations of moderate magnitude between the proportion of time girls spent in major depressive episodes over the 5 years and their boyfriends' relationship dissatisfaction and reports of boyfriends' use of physical coercion during conflicts (Rao, Hammen, & Daley, 1999). Additionally, boyfriends of dysphoric women reported that they provided less support for their romantic partners than boyfriends of nondysphoric women did; also, the boyfriends of the dysphoric women themselves had elevated rates of personality disorder symptoms (Daley & Hammen, 2002). Similarly, in the Australian study of youth at 15 and 20, those who had early-onset and recurrent depression by age 20 (74% of females) had significantly worse-quality romantic relationships at age 20, as compared to never-depressed youth, those with prior but no recurrent depression after 15, and those with first onset after 15 (Hammen, Brennan, Keenan-Miller, & Herr, 2008). Thus, more enduring or frequent depressive experiences in adolescent girls predicted subsequent poorer-quality romantic relationships.

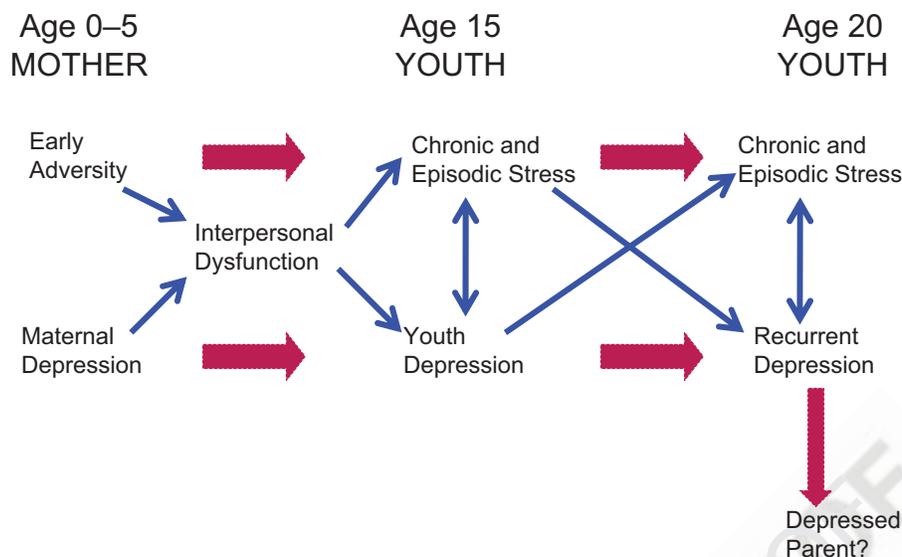
Another alarming pattern besides unhappy romantic relationships is intimate-partner violence. Not only did Rao et al. (1999) find association between girls' major depression and boyfriends' use of coercive conflict tactics in the L.A. high-school senior follow-up study, but similar patterns emerged also in the Australia youth sample. A measure of severe partner violence (whether the individual had been physically hurt, needed medical attention, or called the police) was completed by both the participant and his or her romantic partner. We found that being female and having had a history of diagnosed depression by 15 each more than doubled the odds of being a victim of severe intimate-partner violence (Keenan-Miller, Hammen, & Brennan, 2007). Indicators of social maladjustment at age 15 mediated the association between prior depression and romantic-partner victimization by age 20. The concern for young women with significant or recurrent depression in adolescence is clear: These individuals may select into long-term relationships or marriages with partners who are dissatisfied and who engage in psychologically and physically coercive tactics. Such patterns portend further depression and maladjustment. Why such selections occur is an important topic for future study; possible factors needing to be examined include complementarity or similarity of personal backgrounds and characteristics, maladaptive perceptions and expectations, poor social-problem-

solving skills, and limited options due to actual or perceived lower desirability.

### Parenting Difficulties and Intergenerational Transmission of Depression

If depression takes a toll on intimate relationships, it is unsurprising that it also affects performance in parenting and family roles. Becoming a parent is a dramatic interpersonal example of creating a life context, typically one in which the well-being of the child and parent are inextricably intertwined for many years. Unfortunately, nowhere are the maladaptive consequences of depression more magnified and detrimental than in the interactions of the depressed parent and their children. While there are many risk factors for depression, being the child of a depressed parent is one of the most potent predictors, associated with a 2- to 4-fold increased risk (e.g., Hammen & Brennan, 2001; Weissman et al., 1999). Although there are a host of neurobiological (e.g., genetic, prenatal, neuroendocrine) and psychosocial (e.g., cognitive, temperament, modeling of parent styles) contributors to offspring depression (Goodman, 2007), arguably parenting dysfunction is a key pathway. Numerous studies have shown that family conflict, including perceived maternal hostility toward the child, is higher among families with depressed mothers and is associated with maladaptive outcomes in the children. In our Australia community study, difficulties in parent-child relationships were both more common in, and significantly more predictive of depression in, youth with depressed mothers than they were with depression in youth with nondepressed mothers (Hammen, Brennan, & Shih, 2004).

Moreover, offspring are exposed not only to maternal depression and parenting problems but also to stressful life contexts, including early and chronic adversities. Figure 1 depicts a hypothesized model of the continuity of both depression and stress in families with a depressed parent, capturing the transactional, interpersonal, and intergenerational nature of depression. One implication is that depressed adolescent girls may become depressed mothers, risking the transmission of depression to the next generation. Offspring of depressed parents are at risk not only for continuing depression but also for difficulties in interpersonal functioning including parenting. Along with neurobiological and genetic factors involved in offspring risk, it must also be assumed that interpersonal skills and coping capabilities have been compromised by maladaptive learning experiences. An additional implication is that a young depressed parent, especially one whose child develops emotional and behavioral problems, may be highly stressed by her difficult child and emotionally reactive to the challenges involved in raising such a child. There can be little argument that, like a bad marriage, parenting a difficult child can be very depressing. This is another aspect of being trapped in an interpersonal context that promotes a vicious cycle of stress and depression.



**Fig. 1.** The intergenerational transmission of depression and stress. The red arrows represent continuity from early childhood to adulthood, and the blue arrows represent proposed causal pathways. As shown in the lower portion of the model, maternal depression is a well-known predictor of youth depression; depression during adolescence in turn predicts recurrence of depression in many youth and is hypothesized to predict becoming a depressed parent, especially in females. The upper portion of the model shows the intergenerational transmission of stress in families of depressed parents, from early childhood through the transition to adulthood. Stress and depression in the youth are reciprocally related. Interpersonal dysfunction in childhood is hypothesized to be a mediator of the link between both early stress exposure and maternal depression and the two outcomes of adolescent stress and depression.

## CONCLUSION AND FUTURE DIRECTIONS

Adolescent depression is common and always a matter for concern, but for some youth it is a marker of a persistent course that includes not only recurring or chronic depression but also a stressful, challenging, and ultimately depression-inducing life context. The article has highlighted themes of interpersonal vulnerabilities and dysfunctions that contribute to stress generation—contributing to the occurrence of acute negative events and the creation or selection into intimate and family relationships that may be problematic for all members of the family. More research is needed to identify the sources of interpersonal vulnerabilities and their mechanisms of operation. Further study of the origins of maladaptive beliefs, skills, and resources in social functioning, and how they might interact with neurobiological parameters concerning responses to stress over a developmental course, would provide a fuller account of the etiology of depression—a goal that has both scientific and intervention consequences. Research is also needed that targets those depressed youth at greatest risk for recurrent depression and that identifies effective treatments that promote enduring and successful interpersonal skills, as well as interventions that change the social environment to improve the course of depression and its intergenerational consequences.

### Recommended Reading

Abela, J.R.Z., & Hankin, B.L. (Eds.). (2008). *Handbook of depression in children and adolescents*. New York: Guilford. An edited volume

with chapters covering etiology, treatment/prevention, and special issues of both child and adolescent depression.

- Hilt, L., & Nolen-Hoeksema, S. (Eds.). (2009). *Handbook of adolescent depression*. New Jersey: Erlbaum. The most up-to-date edited volume covering a wide range of topics in adolescent depression.
- Rudolph, K. (2009). Adolescent depression. In I. Gotlib & C. Hammen (Eds.), *Handbook of depression* (pp. 444–466). New York: Guilford. Brief, readable summary of clinical features and risk factors for adolescent depression.

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