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Overgeneral autobiographical memory, emotional maltreatment, and depressive symptoms in adolescence: Evidence of a cognitive vulnerability–stress interaction☆

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A B S T R A C T

Overgeneral autobiographical memory (OGM) is associated with depression and may confer risk for the development of depressed mood, but few longitudinal studies have evaluated OGM as a predictor of depressive symptoms in early adolescence, particularly in the context of environmental stressors. We investigated whether OGM and emotional maltreatment would interact to predict prospective increases in depressive symptoms in early adolescents and whether these effects differed by race. Among 174 seventh-graders, OGM and familial emotional abuse interacted to predict depressive symptoms eight months later, controlling for initial depressive symptoms. Specifically, emotional abuse predicted increases in depressive symptoms among Caucasian adolescents with more OGM, but not among those with less OGM. This association was not significant for African American adolescents. These results provide support for a cognitive vulnerability–stress relationship between OGM and emotional abuse in early adolescence and suggest that these mechanisms of risk for depression may be specific to Caucasian adolescents.

During adolescence, the prevalence of depression increases dramatically, with debilitating consequences (Avenevoli, Knight, Kessler, & Merikangas, 2008). Despite alarming statistics, research only has relatively recently begun to examine the etiology, course, and treatment of depression in adolescents (Abela & Hankin, 2008). Prior work also has indicated that subthreshold depression is associated with substantial functional impairment among adolescents (Avenevoli et al., 2008), and subclinical depressive symptoms in adolescence predict the onset of major depressive disorder (MDD) in adulthood (e.g., van Lang, Ferdinand, & Verhulst, 2007). Thus, given the high prevalence and burden of MDD, more research is needed to evaluate risk factors for the development of depressive symptoms in adolescence.

One feature that has been shown to characterize individuals with depression is overgeneral autobiographical memories (Williams et al., 2007). Autobiographical memory refers to a base of personal information that includes specific episodic memories of past events and more conceptual, self-relevant information (Williams et al., 2007; Williams & Broadbent, 1986). Overgeneral autobiographical memory (OGM) refers to the finding that some individuals, when asked to retrieve a specific memory in response to a cue word, retrieve memories that are categorical events (e.g., "I used to ride in my uncle's truck twice a week") or events that lasted longer than a day (e.g., "My week-long vacation to Maine"), rather than an event that occurred on one day at a particular time and place (e.g., "I scraped my knee at school on Tuesday").

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Research has suggested that recalled memories may remain more general if the conceptual information that is activated during early stages of memory retrieval is related to one's self-representation (Williams, 2006; Williams et al., 2007). Additionally, nonspecific retrieval of memories may serve as a functional avoidance strategy that reduces distress associated with recall of aversive experiences. Although this strategy is adaptive in the short term, it may impact negatively upon problem-solving ability leading to distress as a result of failed problem-solving attempts (Williams, 2006). Over time, an overgeneral retrieval style may occur more broadly as avoidance of details about negative experiences and is reinforced for purposes of affect regulation (Williams, 2006). Along with functional avoidance, the CaR-FA-X model proposes two other possible mechanisms responsible for increased overgeneral memory: first, rumination on abstract self-related information may increase difficulties with the retrieval of specific memories; second, executive dysfunction may lead to deficiencies in the inhibition of interfering material (Williams et al., 2007).

Individuals with a history of depression, as well as adolescents at risk for developing depression (e.g., Kuyken & Dalgleish, 2011), have more overgeneral retrieval styles compared to never-depressed individuals, a distinction demonstrated in adults, adolescents, and children (e.g., Kuyken & Dalgleish, 2011; for a review, see Sumner, Griffith, & Mineka, 2010). More recently, longitudinal studies have evaluated OGM as a risk factor for depressed mood, although few of these studies have used adolescent samples. OGM has been demonstrated to predict the onset of depressive symptoms and episodes in adolescents (Rawal & Rice, 2012) and the onset and duration of depressive episodes among adults (Sumner et al., 2010).

Although OGM appears to serve as a general risk factor for depression, cognitive vulnerability–stress theories of depression in adolescence suggest that cognitive vulnerabilities such as OGM may be particularly harmful when individuals encounter stressful life events (Hankin & Abramson, 2001). However, few longitudinal studies have evaluated OGM as a vulnerability to depression in interaction with life events. Two studies have reported that OGM predicted increases in depressive symptoms among college students who experienced stressful life events or hassles (Anderson, Goddard, & Powell, 2010; Gibbs & Rude, 2004), and another found that OGM in interaction with chronic interpersonal stress predicted recurrence of depressive episodes in late adolescents with a history of major depression (Sumner et al., 2011). However, it is not clear to what extent these findings generalize to early adolescents, who may be at risk for the first onset, rather than the recurrence, of depression.

A cross-cultural study found that overgeneral memory was associated with clinical depression in both British and Taiwanese participants; retrieval of specific versus overgeneral memories in nondepressed adults was found to be affected by culture, in that Taiwanese participants retrieved fewer specific memories and more categoric memories than British participants (Dritschel, Kao, Astell, Neufeind, & Lai, 2011). However, previous studies of OGM have not directly evaluated whether such vulnerability–stress models of OGM apply to African Americans or to adolescents of different races. One existing study found that OGM predicted increases in depressive symptoms among Caucasian females but not among African American females, but did not evaluate intervening life stressors or the effect of OGM in males (Hipwell, Sapotichne, Klostermann, Battista, & Keenan, 2011). Although the reason for the racial difference in the effects of OGM on depression in this study was not clear, the authors speculated that the differential effects of OGM may reflect different cultural experiences that result in greater rehearsal of specific memories for events among Caucasian adolescents. For example, children are better able to recall specific memories when their mothers frequently give them precise information about their past experiences (Reese & Fivush, 1993). Thus, if parents of Caucasian adolescents are more likely to rehearse specific memories with them, then deficits in specificity of autobiographical memories may be more indicative of vulnerability to depression among Caucasian adolescents (who would be expected to have high memory specificity) than among African American adolescents. However, no work to date has replicated the racial differences in the effects of OGM reported by Hipwell et al. (2011), nor has research evaluated racial differences in OGM as a vulnerability to depression in the context of stress.

This limitation is noteworthy because some epidemiological studies have indicated higher rates of depression as well as more chronic and impairing depressive disorders among African American individuals (Sen, 2004; Van Voorhees, Paunesku, Kuwabara, Reinecke, & Basu, 2008; Williams et al., 2007). Additionally, preventive interventions that target modifying negative cognitions have been shown to be less beneficial to African American children (Cardemil, Reivich, Beevers, Seligman, & James, 2007), which highlights the need for the identification of mechanisms of depression among individuals of different races. In contrast, recent epidemiological surveys have suggested that risk for depression may actually be lower among African Americans (e.g., Breslau, Kendler, Su, Gaxiola-Aguilar, & Kessler, 2005). If OGM can explain increases in depression in Caucasian adolescents, but not in African American adolescents, this might help to account for differential risk for depression in the two racial groups.

One stressor that may be particularly potent during early adolescence is emotional maltreatment (Alloy, Abramson, Smith, Gibb, & Nereen, 2006), which is typically conceptualized in terms of emotional abuse (EA) and emotional neglect (EN). EA is a more active form of maltreatment and consists of "verbal assaults on a child's sense of worth or well-being or any humiliating or demeaning behavior directed toward a child by an adult or older person," whereas EN is more passive and is defined as "the failure of caretakers to meet children's basic emotional and psychological needs, including love, belonging, nurturance, and support" (Bernstein et al., 2003, p. 175). Although a lifetime history of EA may be associated with a tendency to have more OGM, perhaps as a functional avoidance strategy to avoid thinking about these negative experiences (Raes, Williams, Hermans, & Eelen, 2005), when evaluated prospectively, emotional maltreatment may also increase risk for depressive symptoms (Hankin, 2005) and diagnosable depressive episodes (Liu, Alloy, Abramson, Iacoviello, & Whitehouse, 2009) in adulthood, as well as during childhood and adolescence (Alloy et al., 2006; Gibb & Abela, 2008).

In the present study, we hypothesized that OGM would interact with EA and EN to predict prospective increases in depressive symptoms among a diverse sample of early adolescents. We expected that adolescents who experienced