

Emotional Memory, Psychopathology, and Well-being¹

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“Has it ever struck you . . . that life is all memory, except for the one present moment that goes by so quickly you hardly catch it going?”

Tennessee Williams, *The Milk Train Doesn’t Stop Here Anymore* (in Dillon, 2008)

“Specific autobiographical memories might lead a person to repeat the past, to become locked into a characteristic way of responding, and so to behave inflexibly, and possibly, in dysfunctional and disruptive ways.”

(Conway, 2005, p. 218).

“A stable, integrated self with a confirmatory past that yields a consistent and rich life story constitutes a self that is able to operate effectively, achieve goals, and relate to others in productive ways.”

(Conway, 2005, p. 596)

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Most of our experience draws on memory. This is illustrated compellingly by Kahneman and colleagues, who, like Tennessee Williams in the preceding quotation, portray the life of the individual as a “string of moments” which, with very few exceptions, simply disappear (Kahneman, Riis, Huppert, Baylis, & Keverne, 2005). It is the remembering rather than the experiencing self that considers our past and future; memory infuses the thoughts, feelings, and activities that populate our experience across our lifespan, and “our experiencing self barely has time to exist” (p. 285). Yet, memory is also motivated, and vulnerable to evaluations, biases, and distortions that are consistent with our emotions, goals, and beliefs about ourselves (Conway, 2005; Levine & Edelman, 2009). These features—ubiquity and malleability—potentially confer to

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memory a central role in the understanding of psychological functioning, psychopathology, and well-being, in both children and adults. Somewhat surprisingly, however, it is only relatively recently that these issues have been considered by contemporary theorists, and significant gaps remain in our knowledge.

Our overarching aim in this chapter is to review what is known about the associations between emotional memory and child and adolescent psychopathology and well-being. In considering these relations, it is important to note that by far the greatest amount of research has been conducted with adults; scant work has focused on children and even less has adopted a developmental perspective. Our first focus is memory and psychopathology; we restrict our attention to emotional and behavioral disorders of childhood and adolescence as defined by the Diagnostic and Statistical Manual (American Psychiatric Association [DSM-IV-TR], 2000; www.dsm5.org), but, to provide a context for understanding the relations to children and youth, we include relevant findings from the adult domain. Thereafter, we turn our attention to the association between memory and well-being. Finally, we speculate about possible developmental influences that may converge to shape the role of memory in psychopathology. These include relatively general factors such as the nature of the child's familial experiences, and those that are more specific, such as family memory practices that may shape the young child's ability to manage everyday emotional memories. Before so doing, however, we consider the nature of the relation between emotion and memory, and how it might relate to psychological functioning.

Memory and Emotion

Memory and emotion are intimately connected, but their association is not straightforward (see Marche & Salmon, in press, for review). Patterns can be found. For example, in general, emotional arousal engages responses; captures attention; and enhances memory vividness, accuracy, completeness, and persistence. Thus, emotional information tends to be better remembered than neutral information (Kensinger, 2009). Nonetheless, the effects of emotion on memory are not always readily predictable, and nor are they necessarily positive or benign; under the latter circumstances, the risk of psychopathology is heightened. Variations in the usual impact depend on the emotion's valence and intensity as well as on individual differences in how emotional memories relate to an individual's goals and are appraised, and whether the memories are subsequently avoided or dwelt upon (Levine & Edelstein, 2009; Vaish, Grossman, & Woodward, 2008). These processes, in turn, reflect the vulnerability of individuals to high arousal and the effectiveness of their regulatory attempts. Thus, it is likely that autobiographical memory has special relevance to understanding psychopathology and well-being, as it encompasses specific memories of the individual's past experiences and personal, evaluative, self-related information (Conway & Pleydell-Pearce, 2000; Nelson & Fivush, 2004).

In this chapter, we understand emotional memory relatively broadly, to mean both memory for emotionally salient personal experiences as well as the influence of emotions on memory, although we note that this distinction is not necessarily clearly delineated in the literature. We anticipate that any relationships between emotional memory and psychological functioning will be bidirectional and recursive; emotions affect how memories are established and managed and vice versa. Thus, emotional and behavioral difficulties (e.g., high levels of anxiety or anger) or positive and successful encounters potentially impact directly on memory by coloring

intra- and interpersonal contexts in ways that influence the child's ability to engage with, make sense of, and recount emotional experiences. These everyday contexts are the topography by which children come to learn ways of remembering and processing emotional material, and this remembered experience, in turn, has implications for future management of their emotional responses.

Two conceptual approaches provide a useful integrative framework to help us consider the role of memory in the presentation and development of psychological disorder and well-being. The first focuses on memory processes that are influential to varying degrees in this link. This approach is consistent with recent theoretical advances emphasizing that, in addition to those that are disorder-specific, shared cognitive and emotional processes transcend traditional diagnostic categories and are continuous with processes found in the general population (Harvey, Watkins, Mansell, & Shafran, 2004; Nolen-Hoeksema & Watkins, 2011). We argue that these processes are also relevant when considering psychological well-being.

The second approach, a developmental psychopathology framework, has now become mainstream. Key principles include that the child's pathway to well-being or psychopathology is multiply determined, involving myriad inter- and intra-individual transactions over time, and increased or moderated by exposure to risk and protective factors (Rutter & Sroufe, 2000). This provides a framework to consider the ways in which emotional memory processes may result in adjustment or maladjustment.

Memory and Psychopathology: Background Considerations

Psychopathology in childhood and adolescence

Approximately 12–15% of school-aged children experience emotional and behavioral difficulties that compromise their development, and the rate is much higher, around 25%, for children living in high-risk situations (Fonagy, Target, Cottrell, Phillips, & Kurtz, 2002). The most common problems are internalizing (anxiety and depression) and externalizing disorders (oppositional defiant and conduct disorder, and attention-deficit hyperactivity disorder [ADHD]) (DSM-IV-TR, 2000). Children with internalizing problems typically display emotions and behaviors that are over-socialized and over-regulated, and manage negative emotions such as fear and anger by avoidance, suppression, or turning the emotion toward the self. In contrast, those with externalizing problems manifest negative emotions that are under-socialized and under-regulated and are managed by non-compliance, aggression, and other maladaptive behavioral strategies. The distress, disruption, and loss of opportunity associated with psychopathology can result in negative cascades of difficulties across childhood and into adulthood; indeed, the vast majority of diagnosed adults have a developmental history of psychological difficulties (Costello, Copeland, & Angold, 2011).

The study of child psychopathology has always lagged behind that of adults, and there remains much vigorous debate about its conceptualization (Egger & Emde, 2011; Mash & Dozois, 2003). This is particularly so given the "ridiculously high" rates of comorbidity, whereby individuals manifest symptoms of several disorders more often than would be expected by chance (Rutter, 2011, p. 649). For example, most children presenting with ADHD will also present with aggression and anxiety; young children with post-traumatic stress tend to manifest both conduct problems and anxiety (Drabick & Kendall, 2010). Psychological disorders change their "form" over time: for example, rates of depression increase for girls in adolescence, often

following childhood anxiety (Costello et al., 2011). The approach of identifying common and specific processes across disorders is therefore particularly useful; shared symptoms may arise from shared causal or maintaining process, whereas specificity may occur because psychological disorders reflect different concerns and goals held by the individual (Harvey et al., 2004).

Emotional memory and child psychopathology

According to seminal theories of social information processing and its association with childhood adjustment, memory *should* play a role across diagnostic disorders (Crick & Dodge, 1994). These propose that deficits associated with the processing of emotional information are instrumental in the development and maintenance of the emotional dysregulation typical in internalizing and externalizing disorders. For example, memory of previous experiences (schemata or scripts) guides how a child understands and interprets a current social situation, which is a critical step in determining a response. Children with psychological difficulties may have memory deficits that impair storage or recall of social information, or may selectively attend to particular cues and not others. Research derived from these models has not tended to focus on the role of memory, however, and nor has it typically crossed disorders. As far as we are aware, only one study to date has investigated social information processing across a range of cognitive tasks and childhood difficulties. Reid, Salmon, and Lovibond (2006) found that, in a sample of 133 non-clinical children aged 8–14 years, anxiety, depression, and aggression were all associated with pervasive cognitive biases of attention, judgment, and memory. That is, there was a general bias across these difficulties for attention to negative information, negative interpretation of ambiguous scenarios, and preferential recall of negative words when encoded self-referentially. Nonetheless, there was also evidence of specificity, in that anxiety was differentially related to attentional bias to threat. These findings suggested that children experiencing a range of symptoms, both internalizing and externalizing, manifest negative information processing biases in all cognitive modalities.

Most of the limited work conducted with children relates to internalizing rather than externalizing disorders despite evidence that youth with conduct problems manifest problematic cognitive and emotional processes that are implicated in the development and maintenance of their difficulties (d'Acremont & Van der Linden, 2007). This dearth may occur because these latter disorders tend to be childhood-specific, and there has not been a strong body of work with adults to set overall direction. We structure our review, therefore, with respect to four main areas that have been identified as salient in the larger body of work with adults and the emerging research with children; memory bias (bias toward recalling or consolidating and elaborating upon information in memory that is related to one's current concerns); overgeneral autobiographical memory (a tendency to recall a general category of event when asked to retrieve a specific experience); non-agentive emotional memories (vivid and distressing memories experienced as intrusive); and disturbances in memory quality (aspects of the quality and content of explicit or autobiographical memories).

Memory bias

Anxiety. Findings from studies using experimental tasks such as the Stroop and dot probe indicate that highly anxious adults and children manifest a selective attentional bias in favor of threat-relevant information. Anxious individuals preferentially attend to negative information and interpret ambiguous information as threatening, rendering the material more readily

encoded and identified (see Cisler & Koster, 2010; Hadwin, Garner, & Perez-Olivas, 2006 for reviews). Consistent with their primary concerns and goals, for individuals with obsessive compulsive disorder, attentional bias appears to be in relation to contamination threat words, while in PTSD, it is toward trauma-related themes (Brewin, 2011; Mitte, 2008; Morgan, 2010). Whether anxiety-driven attentional biases result in better memory for specific threat relevant-information is much less clear. Much, although not all, of the extant research has utilized experimental paradigms such as lexical decision-making or word-stem completion for primed and unprimed stimulus material, and most also use words as stimuli rather than real-life objects (Mitte, 2008).

The strongest evidence is in relation to social anxiety, whereby an individual experiences an extreme fear of negative evaluation by others, which, in turn, leads to avoidance of social interactions and a range of related difficulties (Schmitz, Krämer, & Tuschen-Caffier, 2011). Adults who are socially phobic manifest enhanced recall of threatening autobiographical material, examined via recall of words or social events, rather than on implicit or recognition memory. These findings suggest that social anxiety has its greatest effect on how emotionally threatening information is processed conceptually and elaborated upon (Mitte, 2008; Morgan, 2010). It seems, therefore, that following social stress, socially anxious individuals engage in a detailed review of the negative aspects of the experience, which promotes a negative memory bias and subsequent avoidance of anxiety-inducing situations and thoughts (Schmitz et al., 2011). Indeed, this kind of memory elaboration following an event (post-event processing) occurs in multiple disorders, including depression and PTSD, although there is debate with respect to whether these are essentially the same or different processes (Nolen-Hoeksema & Watkins, 2011).

Anxiety: Findings for youth. There is only nascent evidence that anxious youth manifest a memory advantage for threatening information, and it is possible that associations that have been reported are toward depressive rather than anxious symptoms (Hadwin & Field, 2010). Nonetheless, anxious children, like adults, engage in post-event processing during which they negatively elaborate or exaggerate their threat memories. For example, Schmitz et al. (2011) found that, following a staged social stressor (recounting stories in front of adult judges), high-socially-anxious (relative to low) children (age 11 years) reported more negative post-event processing (i.e., more threat-consistent elaboration of the event), and a week later, their evaluation of their social performance had become more negative. Similarly, Rocha, Marche, and von Baeyer (2009) found that, following a delay, children with higher levels of trait anxiety recalled that they had experienced greater pain during a dental procedure than they had reported at the time. Although negative memory exaggerations occur when children have been highly distressed during invasive and painful medical procedures (Chen, Zelter, Craske, & Katz, 2000), it may be that this tendency is particularly strong for those who also suffer from anxiety.

Post-traumatic stress disorder (PTSD). There is also some evidence that adults with PTSD manifest a negative explicit memory bias for trauma-related stimuli, such as trauma-relevant words, although findings for implicit memory are less consistent (Brewin, 2011), and no research has been conducted with children.

Depression. In both children and adults, depressive disorders are characterized by a shift from pleasant to unpleasant mood (sad, or irritable) that is pervasive and persistent, disrupts everyday

functioning, and is accompanied by distorted negative views of the self (Kyte & Goodyer, 2008). Relative to those who are anxious, depressed individuals do not tend to manifest attentional sensitivity toward particular kinds of information when presented for short periods or subliminally. Instead, they have difficulty removing their attention from negative emotional information, and tend to engage in prolonged processing and elaboration of negative material, particularly when this relates to the self (rumination). This, in turn, promotes a memory bias toward negative and away from positive information, restricted to explicit and autobiographical rather than implicit memory (Joormann & D'Avanzato, 2010; MacLeod, 2010). Perhaps unsurprisingly, memory and other cognitive biases influence each other (Hirsch, Clark, & Mathews, 2006); for example, manipulating interpretive biases (i.e., a tendency to interpret ambiguous information as negative) results in parallel biases in memory (Tran, Hertel, & Joormann, 2011).

As depression is intimately related to the individual's self concept (Morley & Moran, 2011), a focus of research has been the association between characteristics of narratives about salient ("self defining") experiences of the life story and depressed mood. Depressed adults are more likely to include negative events in their life story and to adopt a depressogenic explanatory style when narrating negative past events (Adler, Kissel, & McAdams, 2006; Bohn, 2010). Moreover, the perception that negative events play a central role in the life story, and in defining the self, is associated with symptoms of depression and PTSD and with poorer subjective well-being in younger and older adults (Banks & Salmon, 2011; Berntsen & Rubin, 2007; Berntsen, Rubin, & Siegler, 2011; Boals, 2010; Bohn, 2010). In contrast, young adults who demonstrate a tendency to derive positive knowledge about the self in the context of negative experiences that are central to identity do not experience these high levels of distress (Banks & Salmon, 2013).

Depression: Findings for youth. Parallel patterns are found for depressed children and adolescents (Kuyken & Dalgleish, 2011; MacLeod & Bucks, 2011). Young people with depression manifest a bias for negative self-descriptive adjectives or stories, particularly when these are encoded in relation to the self (e.g., Bishop, Dalgleish, & Yule, 2004; Neshat-Doost, Taghavi, Moradi, Yule, & Dalgleish, 1998; but see Zupan, Hammen, & Jaenicke, 1987). Negative memory biases have also been found in children at risk of depression because their biological mother has a mood disorder; for example, when induced into a sad mood, at-risk children show both attention and recall biases toward negative and away from positive self-referential words compared to not-at-risk children (Gotlib, Traill, Montoya, Joormann, & Chang, 2005; Taylor & Ingram, 1999). It is of note that the strength of the relation between depression and memory bias for negative words increases with age from 10 to 17 years, concomitant with the steep rise in the incidence of depression. This pattern may also reflect both the increasing sophistication and elaboration of the self concept and the escalation of rumination over this period (Haber-mas & Bluck, 2000; Jose & Brown, 2008). Developmental factors are an important focus of future work.

There is emerging evidence that, for youth, too, characteristics of narratives of salient life experiences (such as drawing more connections to the self) are associated with depression and lower self-esteem, but the picture is complicated by both developmental and methodological factors. As much of the research relating to children and adolescents has been conducted with a focus on well-being, we discuss this more fully in that section.

Externalizing problems. Despite findings of deficits in working memory and in verbal and spatial memory (Rhodes, Park, Seth, & Coghill, 2012), evidence of emotional memory biases in children experiencing externalizing problems is limited. For example, boys with conduct problems pay more attention to aggressive than to cooperative interactions, and aggressive children and adolescents recall fewer cues relevant to a social situation than do youth without such problems (Lochman & Dodge, 1994). Moreover, for impulsive adolescents, better recognition of angry relative to happy faces predicts teacher reports of conduct problems and hyperactivity/inattention (d'Acremont & Van der Linden, 2007). Youth with psychopathy (characterized by predatory antisocial behavior and a lack of remorse) manifest a range of emotion-processing deficits, including problems in fear recognition and understanding the emotional significance of negatively valenced information. It is likely, therefore, that emotional memory is compromised in this group too, although research has not yet been conducted (Sylvers, Brennan, & Lilienfeld, 2011). Of note, however, psychopathic relative to nonpsychopathic adults have better memory for their own perpetrated acts of violence relative to those of others, suggesting that further work on memory biases in externalizing problems is warranted (Cooper, Herve, & Yuille, 2007).

Interesting and suggestive evidence regarding memory bias in youth with externalizing problems is also found in comparison of narratives provided by violent youth offenders and same-aged non-offending youth about instances in which they hurt others (Wainryb, Komolova, & Florsheim, 2010). Relative to their age peers, violent youth tended to convey themselves as victims who needed to engage in retribution and, overall, provided more facts while displaying much less evidence of internality (reflections and interpretations, reference to others' cognitions and emotions). Indeed, according to Wainryb and colleagues, at times "the psychological language was so impoverished as to create the impression that their behaviour was incomprehensible even to them" (p. 210).

Overgeneral autobiographical memories

When prompted by emotional cues to recall personal episodic memories, people with certain characteristics are more likely to recall general event categories (Christmases) or extended memories that last longer than a day (my Christmas holiday in Australia) rather than specific events (the Christmas at the beach when I was 11) (Sumner, 2012), a phenomenon referred to as overgeneral autobiographical memory (OGM). The most prominent theoretical approach, which draws on Conway and Pleydell-Peace's (2000) hierarchical model of autobiographical memory, proposes that three underlying processes, together or individually, contribute to OGM: rumination, triggered by negative self-relevant information during retrieval; functional avoidance, whereby the retrieval search is "truncated" and recall of painful or distressing specific episodes is passively avoided; and impaired executive control, associated with deficits in executive resources that limit the individual's ability to conduct an effective retrieval search (Williams et al., 2007). Other theoretical approaches also highlight the association between OGM and emotion regulation mechanisms such as avoidant coping (Goodman, Quas, & Ogle, 2010; see Sumner, 2012; Valentino, 2011, for reviews).

Consistent with Williams' et al. (2007) proposal, overgenerality is linked to rumination, with experimental studies suggesting a causal relation (Sumner, Griffith, & Mineka, 2011; Sutherland & Bryant, 2007); to lower executive control, particularly inhibitory control (Dalgleish et al., 2007); and to avoidance symptoms, including attempts to exclude

memories from consciousness (Dalgleish et al., 2007). Further, avoidance of problematic memories and a nonspecific retrieval style are, at least in the short term, associated with lowered distress (Moore & Zoellner, 2007; Sumner, 2012). OGM is not found in anxious individuals (other than those with trauma-related anxiety), nor in youth with previous or current anxiety or behavioral problems (Rawal & Rice, 2012; Vrielynck, Deplus, & Philippot, 2007; Williams et al., 2007). Nonetheless, further work remains to be conducted specifying the precise ways that these somewhat overlapping dimensions that are proposed to underlie OGM converge and interact (but see Sumner et al., 2011).

Depression. Robust findings show that depressed adults manifest OGM in response to both negatively and positively valenced memory cues, perhaps because both cue types trigger negative memories (Moore & Zoellner, 2007; Williams et al., 2007; Wisco & Nolen-Hoeksema, 2010). OGM also occurs in vulnerable individuals not yet depressed, and those who were previously but not currently depressed. It predicts the course of depressive episodes, and is associated with difficulties imagining specific future episodes and with poorer social problem-solving (Dalgleish, Spinks, Sumner, Griffith, & Mineka, 2010; Dalgleish et al., 2007; Gibbs & Rude, 2004; Van Minnen, Wessel, Verhaak, & Smeenk, 2005). Moreover, OGM is evident following recovery from depression, suggesting that it is not simply a function of depressive symptoms (Dalgleish et al., 2007). Effect sizes tend to be relatively modest, however (Sumner, Griffith, & Mineka, 2010).

Depression: Findings for youth. Research has similarly converged to demonstrate that, relative to non-depressed youth, depressed adolescents generate disproportionately more overgeneral memories in response to positive and negative cue words, albeit again with relatively modest effect sizes (Hipwell, Sapotichne, Klostermann, Battista, & Keenan, 2011; Park, Goodyer, & Teasdale, 2002; Kuyken & Dalgleish, 2011; Kuyken & Howell, 2006; Kuyken, Howell, & Dalgleish, 2006; Rawal & Rice, 2012; Swales, Williams, & Wood, 2001). In the relatively few studies with pre-adolescent children, OGM is also associated with depression when the effects of verbal IQ, verbal memory, and trauma history are controlled (e.g., Drummond, Dritschel, Astell, O'Carroll, & Dalgleish, 2006; Raes, Verstraeten, Bijttebier, Vasey, & Dalgleish, 2010; Vrielynck et al., 2007).

The few extant prospective studies confirm the link between OGM and depression. Hipwell et al. (2011) found that OGM to positive cue words at age 11 predicted depressive symptoms at age 12, controlling for verbal IQ, poverty, and a range of family risk factors. Focusing on adolescents at familial risk of depression, Rawal and Rice (2012) reported that OGM to negative cue words predicted depression 1 year later for girls but not for boys (independent of age, IQ, and current depressive symptoms). Moreover, OGM also predicted new-onset depression in adolescents previously symptom-free, although numbers were small. Rumination improved the prediction of depression but did not attenuate the effect of OGM. It was unclear, given small numbers in the relevant categories, whether OGM was associated with recovery from depression 1 year later (Rawal & Rice, 2012). Findings are complex, however; for example, Sumner and colleagues reported that, in a small sample of adolescents with a depression history, OGM predicted subsequent depression only in interaction with higher levels of chronic interpersonal stress (Sumner et al., 2011; see also Gibbs & Rude, 2004).

Overall, findings suggest that OGM reflects and predicts depression, particularly in at-risk groups. The mixed findings with respect to cue valence raise the possibility that OGM may be associated with impaired processing of emotional material generally, which serves as

a vulnerability and maintaining factor (Kuyken & Dalgleish, 2011; Rawal & Rice, 2012). The association between OGM and age is mixed, however (Drummond et al., 2006; Raes et al., 2010; Rawal & Rice, 2012; Sumner et al., 2010), and there is scope for more research integrating the identified risk factors within a developmental framework.

Post-traumatic stress disorder. OGM is found in adults with PTSD or prolonged childhood emotional trauma, but a trauma history alone does not appear sufficient (Williams et al., 2007). Moreover, as for depression, OGM predicts the onset of PTSD in vulnerable individuals (Kleim & Ehlers, 2008).

PTSD: Findings for youth. Children and adolescents experiencing PTSD also have a greater tendency to retrieve overgeneral memories, although the evidence is more equivocal than for adults. For example, only one study investigating the link between autobiographical memory specificity and PTSD symptoms in adolescents aged 12–18 years found a clear connection between higher levels of PTSD-specific symptoms and less specificity of personal emotional memories (i.e., more OGM) (Stokes, Dritschel, & Bekerian, 2004). A second study reported an association between fewer specific personal memories and higher trauma-related distress, but no relationship between autobiographical memory specificity and intrusive and avoidant symptoms (de Decker, Hermans, Raes, & Eelen, 2003).

Debate continues, and findings are mixed, with respect to whether OGM is associated with a history of trauma or is more specific to depression and PTSD. For example, maltreated children (aged 7–14 years) manifest greater difficulty retrieving specific memories in response to emotion cues than do their non-maltreated peers, over and above depression (Valentino, Toth, & Cicchetti, 2009), whereas a history of trauma was related to fewer rather than more overgeneral memories in depressed adolescents (Kuyken, Howell, & Dalgleish, 2006). Of note, in Valentino et al.'s study, younger relative to older children reported more OGM, highlighting the potential importance of developmental factors. The mixed findings may be due to the almost inevitable confounding of current depression and history of trauma in some research (given their very high comorbidity), and a lack of clear diagnosis of PTSD (de Decker et al., 2003; Goodman et al., 2010; Johnson, Greenhoot, Glisky, & McCloskey, 2005; Meesters, Merckelbach, Murris, & Wessel, 2000).

Non-agentive emotional memories

Remembering is often experienced as a willed or voluntary activity, but at times memories are experienced as intrusive, and some of these intrusive memories are also unwanted. This intrusive quality is a feature of memory in some types of psychopathology.

Post-traumatic stress disorder. PTSD is characterized by disturbances in the experience of agentive remembering (e.g., persistent re-experiencing of the traumatic event, or sensation-based flashbacks), and reflects difficulties regulating arousal associated with these intrusive memories and attempts to avoid reminders of the experience (Brewin, 2011; Jelinek, Randjbar, Seifert, Kellner, & Moritz, 2009).

Much of the research with children has been driven by adult clinical models. Intrusive or unwanted memories are experienced by children and adults at similar rates following traumatic events; for example, more than 75% of children reported intrusive memories 7–10 months after Hurricane Katrina (Sprung & Harris, 2010). Developmental factors are pertinent, however.

Younger children (e.g., preschoolers) who experienced Hurricane Katrina report fewer negative unwanted thoughts than do older children, not necessarily because they do not experience them but because knowledge of the nature of thinking may be required for experiencing such thoughts as intrusive. Sprung and Harris (2010) demonstrated that children's (aged 5–9 years) ability to report their negative intrusive memories of Hurricane Katrina was associated with an independent test of their knowledge about thinking, over and above language ability. For similar reasons, developmentally sensitive diagnostic criteria for PTSD have been proposed, including that, for PTSD in pre-school children, recollections of the trauma do not always appear distressing (Scheeringa, 2008).

Anxiety and depression. Research has pointed to the role of non-agentive memories in other psychological disorders. For example, socially anxious adults experience spontaneous, negative, and intrusive images linked to memories of negative experiences from around the onset or exacerbation of their social anxiety (Wild & Clark, 2011). Similarly, depressed adults commonly report intrusive, involuntary, negative visual images and memories, exacerbated by rumination, resulting in a vicious cycle of emotion dysregulation (Joormann, Hertel, LeMoult, & Gotlib, 2009). Research to date has not investigated this issue with children or adolescents.

Disturbances in memory quality

Post-traumatic stress disorder. Extreme levels of fear arousal experienced during a life-threatening trauma have significant impacts on memory. The literature relating to memory for traumatic experiences in children is covered in the chapter by Greenhoot and Sun. There are, however, specific issues about emotional memory biases in children who develop enduring distress resulting in a disorder (PTSD) as a result of these experiences. Besides re-experiencing, children with PTSD may have deficits in their voluntary memory for trauma. High levels of emotional arousal during the trauma, at least for vulnerable individuals, disrupt attentional and other cognitive processing of some aspects of the event while facilitating processing for other features. The result is that spontaneous and effortful recall of the trauma is dominated by sensory, perceptual, and emotional impressions and impoverished in regard to the conceptual connections between the event's features and components (Brewin & Holmes, 2003; Buckley, Blanchard, & Neill, 2000; Halligan, Clark, & Ehlers, 2002).

Thus, the trauma memory narrative produced by individuals with PTSD is described as fragmented or disorganized, and, from a theoretical perspective, is considered difficult to integrate into a coherent autobiographical account of the trauma (Ehlers & Clark, 2000). Several studies of adults with PTSD have found a lack of temporal organization, reduced causal connection between elements of their trauma memory narrative, and low level of detail, relative to non-trauma-related autobiographical memories (Brewin, 2011; Ehlers & Clark, 2000; Jelinek et al., 2009). Research findings in this area have, however, been inconsistent (O'Kearney, Hunt, & Wallace, 2011; Rubin, 2011), and characterized by significant between-study heterogeneity in definitions of the memory disorganization and in its measurement (O'Kearney & Perrott, 2006).

PTSD: Findings for youth. The evidence with respect to the quality of trauma memory in PTSD in children and adolescents is mixed, with the potential difficulties in adult measures of memory quality often repeated. Most studies have used self-report instruments, while some recent studies have coded memory quality directly from trauma and non-trauma narratives. Some studies

have found a connection between self-reported quality of the trauma memory and PTSD symptoms (Meiser-Stedman, Dalgleish, Smith, Yule, & Glucksman, 2007; McKinnon, Nixon, & Brewer, 2008), while others have reported no connection (Stallard, 2003; Stallard & Smith, 2007). Measures of memory disorganization derived from children's self-generated narrative of the trauma predicted overall severity of traumatic symptoms 2–4 weeks after accidents or assaults that required emergency medical attention or hospitalization (Kenardy et al., 2007). In an important methodological advance, Salmond and colleagues compared trauma narratives to narratives of unpleasant events in young people (aged 8–17 years) who had experienced a potentially traumatic event. Participants with acute stress disorder (a precursor to PTSD) provided trauma (but not non-trauma) narratives containing more repetitions, expressions of uncertainty, confusion, or non-consecutive chunks, and indicators of not comprehending what had occurred. Along with negative appraisals of the trauma experience, trauma narrative disorganization defined in this way predicted higher levels of acute stress (Salmond et al., 2011).

This evidence is preliminary, however, and it is likely that nature of the relation between the quality of children's memory for trauma and persistent post-traumatic symptoms is complex and moderated by a range of factors such as the type of trauma, temporal proximity of the trauma, the children's coping abilities, age at which the trauma was experienced, and how parents and others assist children in making sense of their experiences immediately after the event (Salmon & Bryant, 2002). In addition, given the normative nature of increased arousal and intrusive memories for children following a major traumatic event, the quality of voluntary narrative memories for the trauma in the weeks after the event may reflect potentially productive (rather than pathological) attempts to adapt or make sense of the experience. For example, O'Kearney and colleagues (O'Kearney, Speyer, & Kenardy, 2007) found that children who were more troubled by intrusive symptoms 4–7 weeks after a traumatic event recounted memories of the experience with more causal connectives than children with fewer intrusive symptoms. An interpretation of these findings is that intrusive symptoms were associated with ongoing attempts to provide an explanatory account of the event.

Memory and psychopathology: conclusions

What, then, is the state of knowledge about the association between emotional memory and child and adolescent psychopathology? We draw several conclusions, and in so doing, we note that there is evidence, albeit emergent, of both general and diagnosis-specific memory processes at play.

Thus, across diagnostic categories of psychopathology, we find negative memory biases, which differ in their focus and form. For example, anxious children manifest an attentional bias toward threatening information, and there is some evidence, albeit not strong, that they also show a recall advantage for this information. Children and adolescents experiencing social anxiety not only manifest negatively biased recall, but also engage in negative post-event review of difficult experiences, and their negative memory exaggerations increase over time. It is likely that, as occurs with adults, socially anxious children and adolescents also experience unwanted memories of past negatively evaluated social encounters, but this has not yet been investigated.

For depressed youth, memory is characterized not only by the dominance of negative relative to positive material, but also by difficulty retrieving specific autobiographical memories, and, possibly given evidence with adults, by unwanted intrusive memories of past negative experiences. Each is exacerbated by ruminative tendencies. Finally, children and adolescents

with PTSD memory experience a raft of memory disturbances, including intrusive and unwanted memories, difficulty retrieving specific autobiographical memories, and disorganized trauma narratives.

Given these common memory processes, what might influence the differences found in their form and content? One reason may be that there are more generalized and diffuse memory factors at work when the child's difficulties impact on their emotions and behaviors across a range of situations, such as in some forms of social anxiety, or involve negative self-construct such as in depression than when memory *is* the primary problem, as in PTSD. Beyond this, as we discuss in the following text, differences in the individual's current concerns and goals, influenced by biological factors, learning history, and so on, will also influence how their symptomatology, and related memory processes, are manifested (Levine & Edelstein, 2009; Mansell, Harvey, Watkins, & Shafran, 2009). For example, the concerns of children with anxiety or conduct problems relate to different kinds of threat; this, in turn, is likely associated with goals of avoidance or pro-active aggression as reflected in the memory patterns discussed earlier.

It is clear that emotional memory plays a critical role in maintaining psychopathology. For example, to the extent that an anxious child remembers an event in a negatively exaggerated manner, participation in related events will be rendered more difficult. A traumatized adolescent who fails to retrieve specific autobiographical memories, or who experiences only fragmented recall of a traumatic event, will, in the short term, experience reduced distress and arousal, but in the longer term will be prevented from undergoing the exposure and desensitization to the memory content that is necessary for effective management of arousal (Cohen, Mannarino, & Deblinger, 2010). A socially anxious young person who experiences intrusions of negatively evaluated memories of past social failures will suffer increased arousal and repetitive thinking or post-event processing, and is more likely to engage in avoidance. A depressed adolescent who engages in rumination will fuel a negative memory bias and reduced recall of positive and negative specific memories, with negative implications for their own mood state.

Problematic emotional memories may also escalate psychopathology in at least two ways. First, they may reduce the benefits provided to the young person by a "well-managed" autobiographical memory. These include drawing on positive experiences to counter the negative; forgetting negative ones while recalling those that are positive; engaging with others through sharing and social bonding; and using the past and one's largely favorable view of the self to guide the future (Bluck, 2003; Joormann et al., 2009). Second, and relatedly, they contribute to developmental cascades or causal chains across domains of functioning and over time (Masten & Cicchetti, 2010), such that, as noted by Conway (2005) in the second quotation heading this chapter, the young person becomes locked into a spiraling pattern of thought, emotion, and behavior.

Directions for future research. Important for future research is a greater focus on developmental issues, both conceptually and methodologically. Age, as a proxy for level of maturity in a particular domain, is likely to influence findings in myriad ways, of which we mention but a few. For example, it is unclear whether and how OGM relates to normative developmental changes in children's ability and tendency to retrieve specific events (Valentino, 2011); Peterson, Wang, and Hou (2009) found that, for children (ages 8–14 years) asked to produce specific first memories, a significant proportion of those generated were generic memories. Further, children's language skill and their ability to manage (reflect on, report, and inhibit) their thoughts will influence their ability to report on memory quality or post-event rumination (Flavell, Green,

& Flavell, 2000; Schmitz et al., 2011). The maturity of children's emotion regulation skill and the strategies adopted will also influence the extent to which they can manage their emotional memories (Eisenberg, 1998). The increasing complexity of the developing concept of self is likely to be associated with the presentation of adolescent depression (Harter, 2012). Much of the extant work has focused on whether adult patterns of information processing are found in children, with very little work taking a theoretically driven and developmentally informed approach (MacLeod & Bucks, 2011).

In this regard, it must be noted that the small body of work related to child psychopathology remains hampered by the tendency of research on children's social information processing to follow the "trails blazed" by research with adults (Vasey, Dalgleish, & Silverman, 2003). Methodological problems include failure to ensure that younger children understand the task instructions or the wordlists presented to them, and the adoption of measures and tasks established as reliable and relevant in research with adults but not with children (Vasey et al., 2003). Younger children's performance is particularly sensitive to the nature of the experimental context, and incorporating tasks that capture their everyday functioning (e.g., memories of "real" experiences) will complement the picture provided by laboratory data and experimental tasks (Nelson, 1986).

Emotional Memory and Well-being

Conceptualizations of well-being

Although the work reviewed in the preceding text indicates that emotional memory plays an important role in the development of psychopathology over time, its role in well-being is not quite as straightforward as it may first appear. Our first challenge in considering this likely bidirectional association is to define what is meant by "psychological well-being." A bewildering array of conceptualizations abounds for adults and children, and the term "psychological well-being" is often used very broadly to encompass more specific concepts and indicators such as "psychosocial adjustment," "positive self-concept," "educational achievement," and so on (Camfield, Steuli, & Woodhead, 2009). Most conceptualizations draw a distinction between measures of well-being that are objective or external (i.e., concerned with verifiable indicators such as material well-being, psychosocial functioning, academic achievement, absence of delinquency), versus those that are internal, subjective, and/or experiential (such as negative/positive affect and happiness, quality of life, or "based around articulation of personal meanings"), although these domains influence each other and, under many circumstances, are both relevant (see Camfield et al., 2009, p. 5; Masten, 2001, for reviews).

According to a number of theorists, psychopathology and well-being are on a continuum, ranging from depression to happiness, or mental disorder to flourishing (optimism, gratitude, and pride) (Algoe & Fredrickson, 2011; McLean & Pratt, 2006; Wood & Tarrier, 2010). In support of this perspective are findings of significant negative correlations between measures of psychopathology (e.g., negative affect) and well-being (e.g., dispositional hope, expectation of positive outcomes; Soliday, Garofalo, & Rogers, 2004; but see Richards & Huppert, 2011). Also at the positive end is high self-esteem, which has been shown to promote coping and achievement and to reduce psychological problems (Trzesniewski et al., 2006).

In contrast is the perspective that well-being and psychopathology are separate latent constructs, with positive and negative emotions being only weakly correlated with each other, and optimal mental health determined also by the presence of "that which is 'good'" (e.g.,

Catalino & Fredrickson, 2011, p. 938; Myers & Diener, 1995; Richards & Huppert, 2011). Thus, positive emotions momentarily broaden cognitive and perceptual capacities, and, over time, this more expansive awareness builds durable personal resources such as the ability to respond flexibly to challenges (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009).

The individual's achievement of socially and culturally expected salient developmental tasks has also been considered, variously, to reflect and to lead to well-being. In the early years, significant developmental tasks include attachment to a caregiver, and the development of language, self-regulation, and a sense of self. In adolescence, critical tasks include successful management of academic and social-relational challenges. Key, however, is the formation of a cohesive sense of personal identity, which is reflected in, and shaped by, the subjective life story at the end of that period (Habermas & Bluck, 2000; Habermas & DeSilveira, 2008; Masten & Coatsworth, 1998).

The relatively small body of work investigating associations with emotional memory has tended to conceptualize well-being as low levels of psychopathology; as the presence of strengths and positive functioning; and (or) the achievement of salient developmental tasks. Each of these definitions potentially has different implications for understanding the relation between emotional memory and well-being. For example, given the adoption of lower levels of psychopathology, we might expect to find low levels of the problematic memory patterns that maintained psychopathology that we reviewed in the last section. Focusing on the positive end, we might expect to see something additional to an absence of problematic memory processes, but, instead, evidence of positive self-view reflected in memory content and well-managed memories, variously defined. Unclear, however, is the association between higher levels of good functioning and emotional memory, for example, whether the converse of a negative memory bias is a lesser negative or a positive bias. Of note, when well-being is conceptualized as the achievement of salient developmental tasks, the associations are somewhat complex; memory is associated with well-being to the extent that memory processes and products (e.g., narratives about one's experiences) lay the foundations for the achievement of these salient tasks but memory (i.e., narrative identity) also reflects, or even is, well-being, according to some views (McLean & Pratt, 2006). We might, however, expect individuals experiencing an abundance of positive mood states to build up a repertoire of positive experiences which are "broadly" well remembered, and to develop the confirmatory past and rich life story that is highlighted by Conway (2005) at the beginning of this chapter.

In the subsequent sections, therefore, we follow the structure from our section on emotional memory and psychopathology, and review evidence for memory processes as they relate to well-being.

Memory bias

In contrast to the focus on specific detail of those in a negative mood, findings with adults show that positive mood is associated with a global and encompassing information processing style. Thus, "a buoyant mood may represent a fundamental shift in the breadth of information processing, the result of which could be to cultivate a more open and exploratory mode of attention to both exteroceptive and interoceptive sources of information" (Rowe, Hirsh, & Anderson, 2007, p. 386). Under some circumstances, this can be at the expense of memory accuracy. Individuals in a happy mood process information in a more heuristic or schematic fashion and therefore make more "reconstructive" memory errors (Kensinger, 2009). Non-depressed adults and those who are happy or have higher self-esteem appear able to manage

their memories to maintain their positive functioning by, for example, using positive memories to regulate or manage their negative moods, and by distancing themselves from negative past experiences (Joormann & Siemer, 2004; Wilson & Ross, 2001). To our knowledge, research, to date, has not investigated positive memory biases in children or adolescents.

Autobiographical narrative content

Much of the work investigating associations between emotional memory and well-being draws on related theoretical perspectives that underscore the critical importance of narratives about everyday experiences as both reflecting and contributing to the individual's attempts to make sense of their emotional experience in relation to the self (Fivush, Sales, & Bohanek, 2008; Habermas & Bluck, 2000; McLean & Fournier, 2008; Pennebaker & Greybeal, 2001).

Two bodies of research are particularly relevant. The first highlights the role of narratives in achieving key developmental tasks; for example, reflecting on past events in ways that allows one to draw meaning from them plays a critical part of forming a healthy life story. Thus, redemption sequences, whereby an emotionally negative experience becomes positive, are associated with better self-reported well-being (Bauer, McAdams, & Pals, 2008), and evidence of personal growth or valuing new levels of understanding conveyed in salient personal memories is associated with greater maturity or well-being (Bauer & McAdams, 2010; Bauer, McAdams, & Sakaeda, 2005; McLean & Breen, 2009).

The second relevant body of work is findings with adults of psychological and physical health benefits from creating, via expressive writing, coherent and insightful narratives about past emotional experiences (see Frattaroli, 2006, for review). Individuals who come to incorporate more cognitive mechanism words (consider, realize) show greater benefits, perhaps because they have gained insight and created a coherent story over time (Seih, Chung, & Pennebaker, 2011). The mechanisms of effectiveness are likely to be multiple, but possibilities include that writing facilitates cognitive and emotional regulatory processes (e.g., reinterpretation of the experience, exposure and desensitization to its most difficult aspects; Fivush, Marin, Crawford, Reynolds, & Brewin, 2007; Frattaroli, 2006; Kliever et al., 2011).

As is evident from this discussion, across these two broad research areas, there is considerable diversity in the terminology and conceptualization of making sense or meaning of one's experience and, therefore, in the qualities of the narrative that are assessed (see Park, 2010, for review). These include different levels of sophistication of autobiographical reasoning (statements that establish links between an experience and the self, or one's distant and recent past; Habermas & Bluck, 2000; McLean, Breen, & Fournier, 2010); statements about how an event connects to the self (McLean & Fournier, 2008); general themes such as positive resolution, redemption, and growth (McAdams, Reynolds, Lewis, Patten, & Bowman, 2001; Lilgendahl & McAdams, 2011); narrative coherence (Reese et al., 2011); and cognitive and emotional language (Seih et al., 2011).

Findings for youth. During adolescence, the extent to which one can make meaning of the past with respect to the current self is likely to influence the development of identity, a salient developmental task, and, therefore, well-being (McLean & Breen, 2009; McLean, Pasupathi, & Pals, 2007; see also Bauer & McAdam, 2010). Yet, findings of the relatively few studies conducted with youth are mixed. Indeed, it seems that, at least for younger adolescents and older children, greater evidence of cognitive and emotional processing, variously defined, is either not associated or is negatively associated with well-being. For example, McLean

and Breen (2009) found no association between self-esteem and the extent to which 14–18-year-old adolescents' turning point narratives (episodes during which they experienced significant change) contained a specific explanation of the meaning of the experience for the self (sophistication of meaning), although higher self-esteem was related to redemption themes for boys in particular. In contrast, McLean et al. (2010) reported that, for younger boys in a sample aged 11–18 years, higher sophistication of meaning in narratives of salient events was associated with lower well-being (self esteem and depression scores, averaged), but this pattern between sophistication and well-being was reversed by later adolescence. Across the sample, however, greater well-being was associated with the extent to which meaning making reflected a perception of the self as changing.

With respect to the expressive writing paradigm, several studies have been conducted with nonclinical youth (Reynolds, Brewin, & Saxton, 2000; Soliday et al., 2004), and those with significant difficulties (e.g., Kliewer et al., 2011) and findings again are mixed. For example, Soliday et al. (2004) showed decreases in stress and increases in "positive disposition" (reflecting measures of optimism and hope) for eighth-grade children (14–15 years of age) for an expressive writing relative to a neutral group, although linguistic change was restricted to positive affect words, and there was no intervention effect on cognitive processing words. In contrast, Fivush and colleagues (Fivush et al., 2007) recoded data from Reynolds et al.'s (2000) expressive writing study with children aged 9–13 years; they found that those who wrote more about problems, included more explanations, and more negative evaluations of others displayed higher levels of psychopathology, whereas those who focused on coping manifested fewer somatic symptoms. Of note, also, is the finding that 9–10-year-old children who, at age 3–4 years, had reported more positive content in their narratives of a devastating hurricane showed fewer symptoms of post-traumatic stress (Sales, Fivush, Parker, & Bahrack, 2005).

These findings suggest that conclusions from research with adults cannot necessarily be extended to children and adolescents. Differences may be due to the influence and interactions of a range of factors: cognitive, socio-emotional, and experimental/methodological. For example, in some studies, participants were asked to write about specific autobiographical events in the context of their life story, yet the ability to reflect on one's life and to draw meaning from those reflections, and to reason in a causal manner about personal development, which may well be essential skills to complete this task, are immature in early adolescence (Habermas & Bluck, 2000). Given these cognitive demands, the younger children in these studies may have found this task distressing (as suggested by McLean et al., 2010), or may have responded by interpreting the instructions idiosyncratically. Similarly, the effectiveness of expressive writing tasks for children may be constrained by their ability to create a reasonably coherent narrative of an experience, which remains relatively immature into middle childhood (Fivush et al., 2007). Further, tasks that require young adolescents to focus on negative experiences may elicit or heighten ruminative tendencies (Jose & Brown, 2008). Indeed, the instruction to consider a low or turning point in one's life is potentially rather akin to a standard experimental rumination induction that requests participants to think about, for example, "what your feelings might mean, the kind of person you are, why you react the way you do" (Lyubomirsky & Nolen-Hoeksema, 1995). Concurrently, decreases in self-esteem in early adolescence, and the ongoing development of emotion-regulation skills across childhood and into adolescence, potentially interacts with these cognitive and emotional factors to influence how youth respond to and manage the task of writing about negative experiences (Fivush et al., 2007; Harter & Whitesell, 2003; Molloy, Ram, & Gest, 2011).

Family memory practices. The association between family memory practices and various indices of child and youth well-being has been investigated via a strong body of theoretically grounded work, reviewed elsewhere in this volume (see the Chapter 24 by Fivush) (Fivush, Haden, & Reese, 2006; Fivush, Marin, McWilliams, & Bohanek, 2009; Laible, 2004; Wareham & Salmon, 2006). From a theoretical perspective, via the process of interpreting, evaluating, and understanding the past, reminiscing conversations provide a foundation for children's developing self-understanding and their narrative history (Nelson & Fivush, 2004).

Particularly relevant to the current chapter are findings that how parents, especially mothers, structure conversations about past events with their preschool children has a strong and enduring influence on how children come to remember and talk about their own past experiences. Thus, findings from concurrent, longitudinal, experimental, and training paradigms show that parents who engage their children in conversations about the past that are elaborative, rich in emotion labels and explanations, and in mental state terminology have children who, across the preschool years, come to use similar devices when describing their own personal experiences and, thereafter, come to incorporate these elements into their own independent narratives about everyday experiences (Fivush et al., 2006, for review).

Moreover, family reminiscing practices are associated with young children's achievement of salient developmental milestones (see Fivush et al., 2006; Wareham & Salmon, 2006, for reviews). For example, mothers who reminisce elaboratively about emotional experiences (particularly those that are negative), and include discussion of causal information, have children who develop a superior understanding of emotion, a foundational skill in the development of emotion regulation (Kuebli, Butler, & Fivush, 1995; Laible, 2004, 2011; Newcombe & Reese, 2004; Van Bergen, Salmon, Dadds, & Allen, 2009). Further, research, albeit still only a small amount, suggests that elements of maternal reminiscing (e.g., discussion of emotion, and evaluations and confirmations while discussing positive experiences) are associated with the consistency of young children's self ratings on a measure of self concept and their self-esteem. This is particularly important, given the key theoretical role of autobiographical memory in self-understanding (Bird & Reese, 2006; Reese, Bird, & Tripp, 2007; Welch-Ross, Fasig, & Farrar, 1999). Some research shows that elaborative reminiscing is associated with children's superior language and emergent literacy skill (e.g., Peterson, Jesso, & McCabe, 1999; Reese, 1995). Although there is an association between maternal elaboration and secure attachment, in that, for example, secure relative to less secure mother-child dyads are more elaborative when reminiscing about negative emotions (Laible, 2004; Newcombe & Reese, 2004; see also Fivush & Sales, 2006, for findings with adolescents), the causal direction is difficult to establish; at the very least, there might be a bidirectional relationship. Reminiscing is potentially an important and effective context for contributing to the achievement of developmental milestones, for multiple reasons, including providing a "reflective distance" from an arousing situation, by giving a structure and labels to the child's experience, and by imposing a high level of cognitive and linguistic demands that foster the child's cognitive and emotional development (Fivush et al., 2006; Wareham & Salmon, 2006).

Findings from the preschool years have been extended to middle childhood and early adolescence (typically spanning ages 9–12 years). Cross-sectional and 2-year longitudinal research suggests, for example, that self-esteem and competence or coping (as rated by youth) and/or lower levels of psychopathology (as rated by their parent) are associated with mothers' greater initiation and explanation of emotion conversation and a more collaborative and coordinated reminiscing style (i.e., where participants act as if "they are all of one mind") (Marin, Bohanek,

& Fivush, 2008; Bohanek, Marin, Fivush, & Duke, 2006; Bohanek et al., 2009; Fivush & Sales, 2006).

Interesting complexities emerge, however. For example, reminiscing patterns associated with positive child outcomes differ for mothers and fathers; indeed, aspects of paternal reminiscing are negatively associated with their daughter's self-esteem (Bohanek, Marin, & Fivush, 2008; Fivush et al., 2009). Further, whereas expression and explanation of specific negative emotions, as for the preschool years, is associated with higher youth self-esteem, general emotion talk has been found to have the reverse association (Fivush, Bohanek, & Marin, 2010). Finally, in conversations about a sad event between mothers and their adolescents (aged 11–18 years), greater maternal elaboration was associated with lower sophistication of meaning scores for youth memory narratives (i.e., less evidence of specific emotional, psychological, or relational insight from the event) (McLean & Mansfield, 2012).

In summary, family reminiscing is an important context within which children can come to achieve critical developmental tasks that reflect or lay the foundations for psychological well-being. Far from being restricted to the preschool years, there is emerging evidence that family reminiscing remains associated with various aspects of well-being into early adolescence, particularly with respect to the management of emotion and emotional discussions. There are also suggestions, however, that the optimal reminiscing style, particularly with respect to emotion content, differs for adolescents and younger children. This is not surprising, given the changes in key developmental tasks. Further work, including longitudinal designs, will be important to clarify this issue.

Memory and well-being: conclusions

Research investigating the associations between emotional memory and well-being in youth is relatively immature, and findings are rather mixed. Well established is that, in the preschool years, parental reminiscing style and content is associated with children's achievement of salient developmental tasks such as emotion knowledge and regulation, language skill, and the emergence of self-understanding through narrative. Research with adults suggests that narrative content (e.g., manifesting insight, redemption themes) is associated with greater well-being. For younger adolescents in particular, where narrative skill and the self concept are developing alongside lowered self-esteem and ruminative tendencies, further work is required.

Directions for future research. Important for future research, therefore, is the ongoing refinement of theoretically driven coding systems that clarify the expected associations between cognitive and emotional processing and narratives in youth, and capture and test the influence of the developmental factors considered in the preceding sections (e.g., Reese et al., 2011). These might, for example, include a greater emphasis on the valence and content of narratives (Banks & Salmon, 2013), and include measures of potentially relevant factors (e.g., ruminative tendencies, emotion regulation skills).

In addition, and with our earlier consideration of conceptualizations of well-being in mind, it will be useful for future work to continue to broaden the range of measures beyond those that assess psychopathology and to specify the theoretical and empirical rationale for their choice (e.g., Richards & Huppert, 2011).

As a general comment, we note that the concepts of "self" and "identity" are integral to this area, but are defined somewhat differently in various studies. For some researchers, identity is the life story, whereas for others, various aspects of narratives are *associated with* aspects the

self concept and esteem, and thereby identity. Given the former definition, it becomes more difficult to assess the benefits of narrative content and practice because the narrative is itself the outcome measure (i.e., narrative identity is the salient developmental task). Resolution of this theoretical issue is of course beyond our scope, but we raise it as we believe that it is important for work in this area to engage in somewhat greater specification of the differences, similarities, and implications of each perspective.

Emotional Memory, Psychopathology, and Well-being: Possible Developmental Pathways

Drawing on a developmental psychopathology perspective, we now turn our attention to factors that potentially contribute to the role of emotional memory in well-being and psychopathology. Of course, in reality, the picture will be highly complex, given the complexity of each variable, emotion, memory, and development. We restrict our discussion, therefore, to highlighting several key, overlapping variables that might contribute to the individual's concerns and goals, reflected in what is remembered, and to their emotional memory management: particular kinds of childhood experiences and family interactional patterns, family memory practices or parent-child conversation, and attachment.

Childhood experiences and family interactional patterns

Convergent findings show that common factors relate to both well-being and psychopathology, particularly (but not exclusively) the presence (or absence) of positive and connected relationships with others (Masten, 2001; Richards & Huppert, 2011). Conversely, all categories of childhood psychopathology, internalizing and externalizing, are rendered more likely by negative life experiences such as maltreatment, and parental psychopathology, and these, in turn, are rendered more likely in the context of poverty (Shanahan Copeland, Angold, & Costello, 2008). Exposure to chronically high levels of stress, as may be associated with these experiences, can have significant negative effects on the child's level of arousal and its modulation, and on the quality of the child's key attachment relationships (Cicchetti & Toth, 2005).

Over and above these general effects, investigations of the specific associations between family interactional patterns and childhood disorder underscores how the child's behaviors, emotion regulation skill, and concerns and goals might be shaped in the context of other risk factors such as child temperament (Nolen-Hoeksema & Watkins, 2011). We take two examples from the domain of psychopathology, conduct problems and anxiety.

With respect to the former, findings show that the family context of oppositional children is a highly aggressive one, shaping the child's attentional bias to threat. In a process of reciprocal causality, children and parents respond coercively to each other, and through negative feedback cycles over time, this comes to be supported by cognitive and emotional "biases" and aggressive and non-compliant behavioral patterns (Barrett, Dadds, & Rapee, 1996; Granic & Patterson, 2006). Of note, similar kinds of biases are experienced by maltreated children, who suffer, comorbidly, from a range of psychopathologies, and whose environment is likely also characterized by threat (Goodman et al., 2010).

Findings relating to anxiety, albeit still emerging, similarly highlight the role of different parent–child interactions that may shape the child’s emotion regulation skills, concerns, and goals. Parents with an anxious child tend to engage in “overinvolved” behavior, that is, they provide more assistance to the child than needed, and “overprotect” her from potential distress or danger. Thus, children may develop a heightened attentional bias toward threat as they are taught, explicitly, how to be afraid of their world (Degnan, Almas, & Fox, 2010).

Family memory practices: parent–child conversation

We have previously discussed findings relating to family memory practices and children’s well-being (see also Chapter 24 by Fivush in this volume), showing that reminiscing is a critical context in which children learn how and what to remember about everyday emotional experiences. Despite the very strong body of extant work, however, researchers are only now investigating the reminiscing and its correlates and consequences in family circumstances where the parent–child relationship is less than optimal (Wareham & Salmon, 2006).

For example, Suveg, Zeman, Flannery-Schroeder, and Cassano (2005) investigated discussion of past negative emotional experiences between anxious children (aged 8–12 years) and their mothers. Relative to nonanxious controls, the mothers of anxious children spoke less than their children, used fewer positive emotion words, and demonstrated greater discouragement of their children’s reminiscing. Similarly, Shipman and Zeman (1999) found that maltreating mothers were less likely than non-maltreating controls to engage in reminiscing that included the causes and consequences of emotion, and their children (aged 6–12 years) manifested poorer emotion understanding. Through impoverished or negatively focused reminiscing conversations, children may come to learn how to remember emotional experiences (in an impoverished or negatively focused style) and what is to be remembered or avoided.

Attachment

The attachment relationship between the parent and child is significantly implicated in the child’s ability to manage emotions, memories, and ultimately, in psychopathology or well-being (Aspelmeier, Elliott, & Smith, 2007; Morley & Moran, 2011; Speltz, DeKlyen, & Greenberg, 1999). Theory and supporting evidence demonstrate that attachment is associated with information processing style across the lifespan. As proposed by Dykas and Cassidy (2011), the internal working model of relationships developed through early attachment experiences may influence the extent to which individuals use biased “rules” to process social information. Insecure individuals are expected to use these rules to filter out (from conscious awareness) attachment-relevant social information that would cause excessive emotional pain; secure individuals, on the other hand, are not motivated to defensively exclude this material.

This premise receives some empirical support, albeit mixed; insecure children and adolescents either process attachment-relevant information negatively or avoid it, whereas secure children are able to process both negative and positive emotional information (see Dykas & Cassidy, 2011, for review). Further, children of parents with an avoidant rather than secure attachment style tend to make more memory errors when asked about a highly stressful experience, again suggesting difficulties in processing relevant information (Alexander, Quas, & Goodman, 2002; Edelstein, Burge, & Waterman, 2002).

Conclusions

The research reviewed here highlights that emotional memory plays a critical role in maintaining psychopathology and well-being. Whether the negative or positive aspects of a situation are attended to and stored, whether the memory is intrusive or welcomed, and whether subsequent reflections on the memory are positive or negative, brief or prolonged, and wanted or unwanted all influence the extent to which cognitions and emotions can be managed constructively or not. The ubiquity of memory and its malleability mean that it is strongly implicated in the individual trajectory through life, be this negative or positive.

References

- Adler, J. M., Kissel, E. C., & McAdams, D. P. (2006). Emerging from the CAVE: Attributional style and the narrative study of identity in midlife adults. *Cognitive Therapy and Research, 30*(1), 39–51. doi:10.1007/s10608-006-9005-1
- Alexander, K. W., Quas, J. A., & Goodman, G. S. (2002). Theoretical advances in understanding children's memory for distressing events: The role of attachment. *Developmental Review, 22*(3), 490–519. doi:10.1016/S0273-2297(02)00004-7
- Algoe, S. B., & Fredrickson, B. L. (2011). Emotional fitness and the movement of affective science from lab to field. *American Psychologist, 66*(1), 35–42. doi:10.1037/a0021720
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., Text Revision). Washington, DC: Author.
- Aspelmeier, J. E., Elliott, A. N., & Smith, C. H. (2007). Childhood sexual abuse, attachment, and trauma symptoms in college females: The moderating role of attachment. *Child Abuse & Neglect, 31*(5), 549–566. doi:10.1016/j.chiabu.2006.12.002
- Banks, M., & Salmon, K. (2013). Reasoning about the self in positive and negative ways: Relationship to psychological well-being in young adulthood. *Memory, 21*, 10–26.
- Barrett, P. M., Dadds, M. R., & Rapee, R. M. (1996). Family treatment of childhood anxiety: A controlled trial. *Journal of Consulting and Clinical Psychology, 64*(2), 333–342. doi:10.1037/0022-006X.64.2.333
- Bauer, J. J., & McAdams, D. P. (2010). Eudaimonic growth: Narrative growth goals predict increases in ego development and subjective well-being 3 years later. *Developmental Psychology, 46*(4), 761–772. doi:10.1037/a0019654
- Bauer, J. J., McAdams, D. P., & Pals, J. L. (2008). Narrative identity and eudaimonic well-being. *Journal of Happiness Studies, 9*(1), 81–104. doi:10.1007/s10902-006-9021-6
- Bauer, J. J., McAdams, D. P., & Sakaeda, A. R. (2005). Interpreting the good life: Growth memories in the lives of mature, happy people. *Journal of Personality and Social Psychology, 88*(1), 203–217. doi:10.1037/0022-3514.88.1.203
- Berntsen, D., & Rubin, D. C. (2007). When a trauma becomes a key to identity: Enhanced integration of trauma memories predicts posttraumatic stress disorder symptoms. *Applied Cognitive Psychology, 21*(4), 417–431. doi:10.1002/acp.1290
- Berntsen, D., Rubin, D. C., & Siegler, I. C. (2011). Two versions of life: Emotionally negative and positive life events have different roles in the organization of life story and identity. *Emotion, 11*(5), 1190–1201. doi:10.1037/a0024940
- Bird, A., & Reese, E. (2006). Emotional reminiscing and the development of an autobiographical self. *Developmental Psychology, 42*(4), 613–626. doi:10.1037/0012-1649.42.4.613
- Bishop, S. J., Dalgleish, T., & Yule, W. (2004). Memory for emotional stories in high and low depressed children. *Memory, 12*(2), 214–230. doi:10.1080/09658210244000667

- Bluck, S. (2003). Autobiographical memory: Exploring its functions in everyday life. *Memory, 11*(2), 113–123. doi:10.1080/741938206
- Boals, A. (2010). Events that have become central to identity: Gender differences in the centrality of events scale for positive and negative events. *Applied Cognitive Psychology, 24*(1), 107–121. doi:10.1002/acp.1548
- Bohanek, J. G., Fivush, R., Zaman, W., Lepore, C. E., Merchant, S., & Duke, M. P. (2009). Narrative interaction in family dinnertime conversations. *Merrill-Palmer Quarterly, 55*(4), 488–515. doi:10.1353/mpq.0.0031
- Bohanek, J. G., Marin, K. A., & Fivush, R. (2008). Family narratives, self, and gender in early adolescence. *The Journal of Early Adolescence, 28*(1), 153–176. doi:10.1177/0272431607308673
- Bohanek, J. G., Marin, K. A., Fivush, R., & Duke, M. P. (2006). Family narrative interaction and children's sense of self. *Family Process, 45*(1), 39–54. doi:10.1111/j.1545-5300.2006.00079.x
- Bohn, A. (2010). Generational differences in cultural life scripts and life story memories of younger and older adults. *Applied Cognitive Psychology, 24*(9), 1324–1345. doi:10.1002/acp.1641
- Brewin, C. R. (2011). The nature and significance of memory disturbance in posttraumatic stress disorder. *Annual Review of Clinical Psychology, 7*, 203–227. doi:10.1146/annurev-clinpsy-032210-104544
- Brewin, C. R., & Holmes, E. A. (2003). Psychological theories of posttraumatic stress disorder. *Clinical Psychology Review, 23*, 339–376. doi:10.1016/S0272-7358(03)00033-3
- Buckley, T. C., Blanchard, E. B., & Neill, W. T. (2000). Information processing and PTSD: a review of the empirical literature. *Clinical Psychology Review, 28*(8), 1041–1065. doi:10.1016/S0272-7358(99)00030-6
- Camfield, L., Steuli, N., & Woodhead, M. (2009). What's the use of "Well-Being" in contexts of child poverty? Approaches to research, monitoring and children's participation. *International Journal of Children's Rights, 17*(1), 65–110.
- Catalino, L. I., & Fredrickson, B. L. (2011). A Tuesday in the life of a flourisher: The role of positive emotional reactivity in optimal mental health. *Emotion, 11*(4), 938–950. doi:10.1037/a0024889
- Chen, E., Zelter, L., Craske, M. G., & Katz, E. R. (2000). Children's memories for painful cancer treatment procedures: Implications for distress. *Child Development, 71*(4), 933–947.
- Cicchetti, D., & Toth, S. L. (2005). Child maltreatment. *Annual Review of Clinical Psychology, 1*(1), 409–438. doi:10.1146/annurev.clinpsy.1.102803.144029
- Cisler, J. M., & Koster, E. H. W. (2010). Mechanisms of attentional biases towards threat in anxiety disorders: An integrative review. *Clinical Psychology Review, 30*(2), 203–216. doi:10.1016/j.cpr.2009.11.003
- Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2010). Trauma-focused cognitive-behavioral therapy for traumatized children. In J. R. Weisz, A. E. Kazdin, J. R. Weisz, & A. E. Kazdin (Eds.), *Evidence-based psychotherapies for children and adolescents* (2nd ed., pp. 295–311). New York, NY: Guilford Press.
- Cohn, M. A., Fredrickson, B. L., Brown, S. L., Mikels, J. A., & Conway, A. M. (2009). Happiness unpacked: Positive emotions increase life satisfaction by building resilience. *Emotion, 9*(3), 361–368. doi:10.1037/a0015952
- Conway, M. A. (1996). Autobiographical knowledge and autobiographical memories. In D. C. Rubin & D. C. Rubin (Eds.), *Remembering our past: Studies in autobiographical memory* (pp. 67–93). New York, NY: Cambridge University Press.
- Conway, M. A. (2005). Memory and the self. *Journal of Memory and Language, 53*(4), 594–628. doi:10.1016/j.jml.2005.08.005
- Conway, M. A., & Pleydell-Pearce, C. W. (2000). The construction of autobiographical memories in the self-memory system. *Psychological Review, 107*(2), 261–288. doi:10.1037/0033-295X.107.2.261
- Cooper, B. S., Hervé, H., & Yuille, J. C. (2007). Psychopathy and memory for violence. *The International Journal of Forensic Mental Health, 6*(2), 123–135.
- Costello, E. J., Copeland, W., & Angold, A. (2011). Trends in psychopathology across the adolescent years: What changes when children become adolescents, and when adolescents become

- adults? *Journal of Child Psychology and Psychiatry*, 52(10), 1015–1025. doi:10.1111/j.1469-7610.2011.02446.x
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115(1), 74–101. doi:10.1037/0033-2909.115.1.74
- d'Acremont, M., & Van der Linden, M. (2007). How is impulsivity related to depression in adolescence? Evidence from a French validation of the cognitive emotion regulation questionnaire. *Journal of Adolescence*, 30(2), 271–282. doi:10.1016/j.adolescence.2006.02.007
- Dalglisch, T., Spinks, H., Yiend, J., & Kuyken, W. (2001). Autobiographical memory style in seasonal affective disorder and its relationship to future symptom remission. *Journal of Abnormal Psychology*, 110(2), 335–340. doi:10.1037/0021-843X.110.2.335
- Dalglisch, T., Williams, J. M. G., Golden, A.-M. J., Perkins, N., Feldman Barrett, L., Barnard, P. J., Au Yeung, C., Murphy, V., Elward, R., Tchanturia, K., & Watkins, E. (2007). Reduced specificity of autobiographical memory and depression: The role of executive control. *Journal of Experimental Psychology: General*, 136(1), 23–42. doi:10.1037/0096-3445.136.1.23
- de Decker, A., Hermans, D., Raes, F., & Eelen, P. (2003). Autobiographical memory specificity and trauma in inpatient adolescents. *Journal of Clinical Child and Adolescent Psychology*, 32(1), 22–31. doi:10.1207/s15374420360533031
- Degnan, K. A., Almas, A. N., & Fox, N. A. (2010). Temperament and the environment in the etiology of childhood anxiety. *Journal of Child Psychology and Psychiatry*, 51, 497–517. doi:10.1111/j.1469-7610.2010.02228.x
- Dillon, B. (2008). In the dark room. In H. Harvey Wood & A. S. Byatt (Eds.), *Memory: An anthology* (pp. 151–155). London, UK: Vintage Books.
- Drabick, D. A. G., & Kendall, P. C. (2010). Developmental psychopathology and the diagnosis of mental health problems among youth. *Clinical Psychology: Science and Practice*, 17(4), 272–280. doi:10.1111/j.1468-2850.2010.01219.x
- Drummond, L. E., Dritschel, B., Astell, A., O'Carroll, R. E., & Dalglisch, T. (2006). Effects of age, dysphoria, and emotion-focusing on autobiographical memory specificity in children. *Cognition and Emotion*, 20(3–4), 488–505. doi:10.1080/02699930500341342
- Dykas, M. J., & Cassidy, J. (2011). Attachment and the processing of social information across the life span: Theory and evidence. *Psychological Bulletin*, 137(1), 19–46. doi:10.1037/a0021367
- Edelstein, S. B., Burge, D., & Waterman, J. (2002). Older children in preadoptive homes: Issues before termination of parental rights. *Child Welfare*, 81(2), 101–121.
- Egger, H. L., & Emde, R. N. (2011). Developmentally sensitive diagnostic criteria for mental health disorders in early childhood. *American Psychologist*, 66(2), 95–106. doi:10.1037/a0021026
- Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, 38(4), 319–345. doi:10.1016/S0005-7967(99)00123-0
- Eisenberg, N. (1998). The socialization of socioemotional competence. In D. Pushkar, W. M. Bukowski, A. E. Schwartzman, D. M. Stack, D. R. White, & D. Pushkar (Eds.), *Improving competence across the lifespan: Building interventions based on theory and research* (pp. 59–78). New York, NY: Plenum Press.
- Fivush, R., Bohanek, J. G., & Marin, K. (2010). Patterns of family narrative co-construction in relation to adolescent identity and well-being. In K. C. McLean, M. Pasupathi, K. C. McLean & M. Pasupathi (Eds.), *Narrative development in adolescence: Creating the storied self* (pp. 45–63). New York, NY: Springer Science + Business Media. doi:10.1007/978-0-387-89825-4_3
- Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. *Child Development*, 77(6), 1568–1588. doi:10.1111/j.1467-8624.2006.00960.x
- Fivush, R., Marin, K., Crawford, M., Reynolds, M., & Brewin, C. R. (2007). Children's narratives and well-being. *Cognition and Emotion*, 21(7), 1414–1434. doi:10.1080/02699930601109531

- Fivush, R., Marin, K., McWilliams, K., & Bohanck, J. G. (2009). Family reminiscing style: Parent gender and emotional focus in relation to child well-being. *Journal of Cognition and Development, 10*(3), 210–235. doi:10.1080/15248370903155866
- Fivush, R., & Sales, J. M. (2006). Coping, attachment, and mother-child narratives of stressful events. *Merrill-Palmer Quarterly: Journal of Developmental Psychology. Special Issue: Parent-Child Discourse and the Early Development of Understanding, 52*(1), 125–150. doi:10.1353/mpq.2006.0003
- Fivush, R., Sales, J. M., & Bohanck, J. G. (2008). Meaning making in mothers' and children's narratives of emotional events. *Memory, 16*(6), 579–594. doi:10.1080/09658210802150681
- Flavell, J. H., Green, F. L., & Flavell, E. R. (2000). Development of children's awareness of their own thoughts. *Journal of Cognition and Development, 1*(1), 97–112. doi:10.1207/S15327647JCD0101N_10
- Fonagy, P., Target, M., Cottrell, D., Phillips, J., & Kurtz, Z. (2002). *What works for whom?: A critical review of treatments for children and adolescents*. New York, NY: Guilford Press.
- Frattaroli, J. (2006). Experimental disclosure and its moderators: A meta-analysis. *Psychological Bulletin, 132*(6), 823–865. doi:10.1037/0033-2909.132.6.823
- Gibbs, B. R., & Rude, S. S. (2004). Overgeneral autobiographical memory as depression vulnerability. *Cognitive Therapy and Research, 28*(4), 511–526. doi:10.1023/B:COsTR.0000045561.72997.7c
- Goodman, G. S., Quas, J. A., & Ogle, C. M. (2010). Child maltreatment and memory. *Annual Review of Psychology, 61*, 325–351. doi:10.1146/annurev.psych.093008.100403
- Gotlib, I. H., Trull, S. K., Montoya, R. L., Joormann, J., & Chang, K. (2005). Attention and memory biases in the offspring of parents with bipolar disorder: Indications from a pilot study. *Journal of Child Psychology and Psychiatry, 46*(1), 84–93. doi:10.1111/j.1469-7610.2004.00333.x
- Granic, I., & Patterson, G. R. (2006). Toward a comprehensive model of antisocial development: A dynamic systems approach. *Psychological Review, 113*(1), 101–131. doi:10.1037/0033-295X.113.1.101
- Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin, 126*(5), 748–769. doi:10.1037/0033-2909.126.5.748
- Habermas, T., & de Silveira, C. (2008). The development of global coherence in life narratives across adolescence: Temporal, causal, and thematic aspects. *Developmental Psychology, 44*(3), 707–721. doi:10.1037/0012-1649.44.3.707
- Hadwin, J. A., & Field, A. P. (2010). An introduction to the study of information processing biases in childhood anxiety: Theoretical and methodological issues, *Information processing biases and anxiety: A developmental perspective* (pp. xi, 1–17, 31). Chichester, UK: Wiley-Blackwell. doi:10.1002/9780470661468.ch1
- Hadwin, J. A., Garner, M., & Perez-Olivas, G. (2006). The development of information processing biases in childhood anxiety: A review and exploration of its origins in parenting. *Clinical Psychology Review, 26*(7), 876–894. doi:10.1016/j.cpr.2005.09.004
- Halligan, S. L., Clark, D. M., & Ehlers, A. (2002). Cognitive processing, memory, and the development of PTSD symptoms: Two experimental analogue studies. *Journal of Behaviour Therapy and Experimental Psychiatry, 33*, 73–89. doi: 10.1016/S0005-7916(02)00014-9
- Harter, S. (2012). *The construction of the self: Developmental and sociocultural foundations*. New York: Guilford Press.
- Harter, S., & Whitesell, N. R. (2003). Beyond the debate: Why some adolescents report stable self-worth over time and situation, whereas others report changes in self-worth. *Journal of Personality, 71*(6), 1027–1058. doi:10.1111/1467-6494.7106006
- Harvey, A., Watkins, E., Mansell, W., & Shafran, R. (2004). *Cognitive and behavioural processes across psychological disorders: A transdiagnostic approach to research and treatment*. New York, NY: Oxford University Press.
- Hipwell, A. E., Sapotichne, B., Klostermann, S., Battista, D., & Keenan, K. (2011). Autobiographical memory as a predictor of depression vulnerability in girls. *Journal of Clinical Child and Adolescent Psychology, 40*(2), 254–265. doi:10.1080/15374416.2011.546037

- Hirsch, C. R., Clark, D. M., & Mathews, A. (2006). Imagery and interpretations in social phobia: Support for the combined cognitive biases hypothesis. *Behavior Therapy, 37*(3), 223–236. doi:10.1016/j.beth.2006.02.001
- Jelicink, L., Randjbar, S., Scifert, D., Kellner, M., & Moritz, S. (2009). The organization of autobiographical and nonautobiographical memory in posttraumatic stress disorder (PTSD). *Journal of Abnormal Psychology, 118*(2), 288–298. doi:10.1037/a0015633
- Johnson, R. J., Greenhoot, A. F., Glisky, E., & McCloskey, L. A. (2005). The relations among abuse, depression, and adolescents' autobiographical memory. *Journal of Clinical Child and Adolescent Psychology, 34*(2), 235–247. doi:10.1207/s15374424jccp3402_3
- Joormann, J., & D'Avanzo, C. (2010). Emotion regulation in depression: Examining the role of cognitive processes. *Cognition and Emotion, 24*(6), 913–939. doi:10.1080/02699931003784939
- Joormann, J., Hertel, P. T., LeMoult, J., & Gotlib, I. H. (2009). Training forgetting of negative material in depression. *Journal of Abnormal Psychology, 118*(1), 34–43. doi:10.1037/a0013794
- Joormann, J., & Siemer, M. (2004). Memory accessibility, mood regulation, and dysphoria: Difficulties in repairing sad mood with happy memories? *Journal of Abnormal Psychology, 113*(2), 179–188. doi:10.1037/0021-843X.113.2.179
- Jose, P. E., & Brown, I. (2008). When does the gender difference in rumination begin? Gender and age differences in the use of rumination by adolescents. *Journal of Youth and Adolescence, 37*(2), 180–192. doi:10.1007/s10964-006-9166-y
- Kahneman, D., Riis, J., Huppert, F. A., Baylis, N., & Keverne, B. (2005). Living, and thinking about it: Two perspectives on life. In F. A. Huppert, N. Baylis, & B. Keverne (Eds.), *The science of well-being* (pp. 285–304). New York, NY: Oxford University Press.
- Kenardy, J., Smith, A., Spence, S. H., Lilley, P., Newcombe, P., Dob, R., & Robinson, S. (2007). Dissociation in children's trauma narratives: An exploratory investigation. *Journal of Anxiety Disorders, 21*, 456–466. doi:10.1016/j.janxdis.2006.05.007
- Kensinger, E. A. (2009). Remembering the details: Effects of emotion. *Emotion Review, 1*(2), 99–113. doi:10.1177/1754073908100432
- Kleim, B., & Ehlers, A. (2008). Reduced autobiographical memory specificity predicts depression and posttraumatic stress disorder after recent trauma. *Journal of Consulting and Clinical Psychology, 76*(2), 231–242. doi:10.1037/0022-006X.76.2.231
- Klicwer, W., Lepore, S. J., Farrell, A. D., Allison, K. W., Meyer, A. L., Sullivan, T. N., & Greene, A. Y. (2011). A school-based expressive writing intervention for at-risk urban adolescents' aggressive behavior and emotional lability. *Journal of Clinical Child and Adolescent Psychology, 40*(5), 693–705. doi:10.1080/15374416.2011.597092
- Kuebli, J., Butler, S., & Fivush, R. (1995). Mother-child talk about past emotions: Relations of maternal language and child gender over time. *Cognition and Emotion, 9*(2–3), 265–283. doi:10.1080/02699939508409011
- Kuyken, W., & Dalgleish, T. (2011). Overgeneral autobiographical memory in adolescents at risk for depression. *Memory, 19*(3), 241–250. doi:10.1080/09658211.2011.554421
- Kuyken, W., & Howell, R. (2006). Facets of autobiographical memory in adolescents with major depressive disorder and never-depressed controls. *Cognition and Emotion, 20*(3–4), 466–487. doi:10.1080/02699930500342639
- Kuyken, W., Howell, R., & Dalgleish, T. (2006). Overgeneral autobiographical memory in depressed adolescents with, versus without, a reported history of trauma. *Journal of Abnormal Psychology, 115*(3), 387–396. doi:10.1037/0021-843X.115.3.387
- Kyte, Z., & Goodyer, I. (2008). Social cognition in depressed children and adolescents. In C. Sharp, P. Fonagy, I. Goodyer, C. Sharp, P. Fonagy, & I. Goodyer (Eds.), *Social cognition and developmental psychopathology* (pp. 201–237). New York, NY: Oxford University Press.
- Laible, D. (2004). Mother-child discourse in two contexts: Links with child temperament, attachment security, and socioemotional competence. *Developmental Psychology, 40*(6), 979–992. doi:10.1037/0012-1649.40.6.979

- Laible, D. (2011). Does it matter if preschool children and mothers discuss positive vs. negative events during reminiscing? Links with mother reported attachment, family emotional climate, and socioemotional development. *Social Development, 20*(2), 394–411. doi:10.1111/j.1467-9507.2010.00584.x
- Levine, L. J., & Edelman, R. S. (2009). Emotion and memory narrowing: A review and goal-relevance approach. *Cognition and Emotion, 23*(5), 833–875. doi:10.1080/02699930902738863
- Lilgendahl, J. P., & McAdams, D. P. (2011). Constructing stories of self growth: How individual differences in patterns of autobiographical reasoning relate to well-being in midlife. *Journal of Personality, 79*(2), 391–428. doi:10.1111/j.1467-6494.2010.00688.x
- Lochman, J. E., & Dodge, K. A. (1994). Social-cognitive processes of severely violent, moderately aggressive, and nonaggressive boys. *Journal of Consulting and Clinical Psychology, 62*(2), 366–374. doi:10.1037/0022-006X.62.2.366
- Lyubomirsky, S., & Nolen-Hoeksema, S. (1995). Effects of self-focused rumination on negative thinking and interpersonal problem solving. *Journal of Personality and Social Psychology, 69*(1), 176–190. doi:10.1037/0022-3514.69.1.176
- MacLeod, C. (2010). Current directions at the juncture of clinical and cognitive science: A commentary on the special issue. *Applied Cognitive Psychology, 24*, 450–463.
- MacLeod, C., & Bucks, R. S. (2011). Emotion regulation and the cognitive-experimental approach to emotional dysfunction. *Emotion Review, 3*(1), 62–73. doi:10.1177/1754073910380970
- Mansell, W., Harvey, A., Watkins, E., & Shafran, R. (2009). Conceptual foundations of the transdiagnostic approach to CBT. *Journal of Cognitive Psychotherapy, 23*(1), 6–19. doi:10.1891/0889-8391.23.1.6
- Marin, K. A., Bohanek, J. G., & Fivush, R. (2008). Positive effects of talking about the negative: Family narratives of negative experiences and preadolescents' perceived competence. *Journal of Research on Adolescence, 18*(3), 573–593. doi:10.1111/j.1532-7795.2008.00572.x
- Mash, E. J., & Dozois, D. J. A. (2003). Child psychopathology: A developmental-systems perspective. In E. J. Mash & R. A. Barkley (Eds.), *Child psychopathology* (2nd ed., pp. 3–71). New York, NY: Guilford Press.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*(3), 227–238. doi:10.1037/0003-066X.56.3.227
- Masten, A. S., & Cicchetti, D. (2010). Developmental cascades. *Development and Psychopathology, 22*(3), 491–495. doi:10.1017/S0954579410000222
- McAdams, D. P., Reynolds, J., Lewis, M., Patten, A. H., & Bowman, P. J. (2001). When bad things turn good and good things turn bad: Sequences of redemption and contamination in life narrative and their relation to psychosocial adaptation in midlife adults and in students. *Personality and Social Psychology Bulletin, 27*, 474–485. doi:10.1177/0146167201274008
- McKinnon, A. C., Nixon, R. D. V., & Brewer, N. (2008). The influence of data-driven processing on perceptions of memory quality and intrusive symptoms in children following traumatic events. *Behaviour Research and Therapy, 46*(6), 766–775. doi:10.1016/j.brat.2008.02.008
- McLean, K. C., & Breen, A. V. (2009). Processes and content of narrative identity development in adolescence: Gender and well-being. *Developmental Psychology, 45*(3), 702–710. doi:10.1037/a0015207
- McLean, K. C., Breen, A. V., & Fournier, M. A. (2010). Constructing the self in early, middle, and late adolescent boys: Narrative identity, individuation, and well-being. *Journal of Research on Adolescence, 20*(1), 166–187. doi:10.1111/j.1532-7795.2009.00633.x
- McLean, K. C., & Fournier, M. A. (2008). The content and processes of autobiographical reasoning in narrative identity. *Journal of Research in Personality, 42*(3), 527–545. doi:10.1016/j.jrp.2007.08.003
- McLean, K. C., & Mansfield, C. D. (2012). The co-construction of adolescent narrative identity: Narrative processing as a function of adolescent age, gender, and maternal scaffolding. *Developmental Psychology, no pagination specified, 48*(2), 436–447. doi:10.1037/a0025563

- McLean, K. C., Pasupathi, M., & Pals, J. L. (2007). Selves creating stories creating selves: A process model of self-development. *Personality and Social Psychology Review*, *11*(3), 262–278. doi:10.1177/1088868307301034
- McLean, K. C., & Pratt, M. W. (2006). Life's little (and big) lessons: Identity statuses and meaning-making in the turning point narratives of emerging adults. *Developmental Psychology*, *42*(4), 714–722. doi:10.1037/0012-1649.42.4.714
- Meesters, C., Merckelbach, H., Muris, P., & Wessel, I. (2000). Autobiographical memory and trauma in adolescents. *Journal of Behavior Therapy and Experimental Psychiatry*, *31*(1), 29–39. doi:10.1016/S0005-7916(00)00006-9
- Meiser-Stedman, R., Dalgleish, T., Smith, P., Yule, W., & Glucksman, E. (2007). Diagnostic, demographic, memory quality, and cognitive variables associated with acute stress disorder in children and adolescents. *Journal of Abnormal Psychology*, *116*(1), 65–79. doi: 10.1037/0021-843X.116.1.65
- Mitte, K. (2008). Memory bias for threatening information in anxiety and anxiety disorders: A meta-analytic review. *Psychological Bulletin*, *134*(6), 886–911. doi:10.1037/a0013343
- Molloy, L. E., Ram, N., & Gest, S. D. (2011). The storm and stress (or calm) of early adolescent self-concepts: Within- and between-subjects variability. *Developmental Psychology*, *47*(6), 1589–1607. doi:10.1037/a0025413
- Moore, S. A., & Zoellner, L. A. (2007). Overgeneral autobiographical memory and traumatic events: An evaluative review. *Psychological Bulletin*, *133*(3), 419–437. doi:10.1037/0033-2909.133.3.419
- Morgan, J. (2010). Autobiographical memory biases in social anxiety. *Clinical Psychology Review*, *30*(3), 288–297. doi: 10.1016/j.cpr.2009.12.003
- Morley, T. E., & Moran, G. (2011). The origins of cognitive vulnerability in early childhood: Mechanisms linking early attachment to later depression. *Clinical Psychology Review*, *31*(7), 1071–1082. doi:10.1016/j.cpr.2011.06.006
- Myers, D. G., & Diener, E. (1995). Who is happy? *Psychological Science*, *6*(1), 10–19. doi:10.1111/j.1467-9280.1995.tb00298.x
- Nelson, K. (1986). Event knowledge and cognitive development. In K. Nelson (Ed.), *Event knowledge: Structure and function in development* (pp. 1–19). Hillsdale, New Jersey: Lawrence Erlbaum.
- Nelson, K., & Fivush, R. (2004). The emergence of autobiographical memory: A social cultural developmental theory. *Psychological Review*, *111*(2), 486–511. doi:10.1037/0033-295X.111.2.486
- Neshat-Doost, H. T., Taghavi, M. R., Moradi, A. R., Yule, W., & Dalgleish, T. (1998). Memory for emotional trait adjectives in clinically depressed youth. *Journal of Abnormal Psychology*, *107*(4), 642–650. doi:10.1037/0021-843X.107.4.642
- Newcomb, R., & Reese, E. (2004). Evaluations and orientations in mother-child narratives as a function of attachment security: A longitudinal investigation. *International Journal of Behavioral Development*, *28*(3), 230–245. doi:10.1080/01650250344000460
- Nolen-Hocksema, S., & Watkins, E. R. (2011). A heuristic for developing transdiagnostic models of psychopathology: Explaining multifinality and divergent trajectories. *Perspectives on Psychological Science*, *6*(6), 589–609. doi:10.1177/1745691611419672
- O'Kearney, R., Hunt, A., & Wallace, N. (2011). Integration and organisation of trauma memories and post traumatic symptoms. *Journal of Traumatic Stress*, *24*(6), 716–725. doi:10.1002/jts.20690
- O'Kearney, R., & Perrott, K. (2006). Trauma narratives in posttraumatic stress disorder: A review. *Journal of Traumatic Stress*, *19*(1), 81–93. doi:10.1002/jts.20099
- O'Kearney, R., Speyer, J., & Kenardy, J. (2007). Children's narrative memory for accidents and their post-traumatic distress. *Applied Cognitive Psychology*, *21*(7), 821–838. doi:10.1002/acp.1294
- Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin*, *136*(2), 257–301. doi: 10.1037/a0018301
- Park, R. J., Goodyer, I. M., & Teasdale, J. D. (2002). Categorical overgeneral autobiographical memory in adolescents with major depressive disorder. *Psychological Medicine: A Journal of Research in Psychiatry and the Allied Sciences*, *32*(2), 267–276. doi:10.1017/S0033291702005913

- Pennebaker, J. W., & Graybeal, A. (2001). Patterns of natural language use: Disclosure, personality, and social integration. *Current Directions in Psychological Science*, 10(3), 90–93. doi:10.1111/1467-8721.00123
- Peterson, C., Jesso, B., & McCabe, A. (1999). Encouraging narratives in preschoolers: An intervention study. *Journal of Child Language*, 26(1), 49–67. doi:10.1017/S0305000998003651
- Peterson, C., Wang, Q., & Hou, Y. (2009). “When I was little”: Childhood recollections in Chinese and European Canadian grade school children. *Child Development*, 80(2), 506–518. doi:10.1111/j.1467-8624.2009.01275.x
- Racs, F., Verstracten, K., Bijttebier, P., Vasey, M. W., & Dalgleish, T. (2010). Inhibitory control mediates the relationship between depressed mood and overgeneral memory recall in children. *Journal of Clinical Child and Adolescent Psychology*, 39(2), 276–281. doi.org/10.1080/15374410903532684
- Rawal, A., & Rice, F. (2012). Examining overgeneral autobiographical memory as a risk factor for adolescent depression. *Journal of the American Academy of Child and Adolescent Psychiatry*, 51(5), 518–527.
- Reese, E. (1995). Predicting children’s literacy from mother-child conversations. *Cognitive Development*, 10(3), 381–405. doi:10.1016/0885-2014(95)90003-9
- Reese, E., Bird, A., & Tripp, G. (2007). Children’s self-esteem and moral self: Links to parent-child conversations. *Social Development*, 16(3), 460–478. doi:10.1111/j.1467-9507.2007.00393.x
- Reese, E., Haden, C. A., Baker-Ward, L., Bauer, P. A., Fivush, R., & Ornstein, P. (2011). Coherence of personal narratives across the lifespan: A multidimensional model and coding method. *Journal of Cognition and Development*, 12(4), 424–462. doi:10.1080/15248372.2011.587854
- Reid, S. C., Salmon, K., & Lovibond, P. F. (2006). Cognitive biases in childhood anxiety, depression, and aggression: Are they pervasive or specific? *Cognitive Therapy and Research*, 30(5), 531–549. doi:10.1007/s10608-006-9077-y
- Reynolds, M., Brewin, C. R., & Saxton, M. (2000). Emotional disclosure in school children. *Journal of Child Psychology and Psychiatry*, 41(2), 151–159. doi:10.1017/S0021963099005223
- Rhodes, S. M., Park, J., Seth, S., & Coghill, D. R. (2012). A comprehensive investigation of memory impairment in attention deficit hyperactivity disorder and oppositional defiant disorder. *Journal of Child Psychology and Psychiatry*, 53(2), 128–137.
- Richards, M., & Huppert, F. A. (2011). Do positive children become positive adults? Evidence from a longitudinal birth cohort study. *The Journal of Positive Psychology*, 6(1), 75–87. doi:10.1080/17439760.2011.536655
- Rocha, E. M., Marché, T. A., & von Baeyer, C. L. (2009). Anxiety influences children’s memory for procedural pain. *Pain Research & Management*, 14(3), 233–237.
- Rowe, G., Hirsh, J. B., & Anderson, A. K. (2007). Positive affect increases the breadth of attentional selection. *PNAS Proceedings of the National Academy of Sciences of the United States of America*, 104(1), 383–388. doi:10.1073/pnas.0605198104
- Rubin, D. C. (2010). The coherence of memory for trauma: Evidence from posttraumatic stress disorder. *Consciousness and Cognition*. doi:10.1016/j.concog.2010.03.018
- Rutter, M. (2011). Research review: Child psychiatric diagnosis and classification: Concepts, findings, challenges and potential. *Journal of Child Psychology and Psychiatry*, 52(6), 647–660. doi:10.1111/j.1469-7610.2011.02367.x
- Rutter, M., & Sroufe, L. A. (2000). Developmental psychopathology: Concepts and challenges. *Development and Psychopathology*, 12(3), 265–296. doi:10.1017/S0954579400003023
- Sales, J. M., Fivush, R., Parker, J., & Bahrck, L. (2005). Stressing memory: Long-term relations among children’s stress, recall and psychological outcome following Hurricane Andrew. *Journal of Cognition and Development*, 6(4), 529–545 doi:10.1207/s15327647jcd0604_5
- Salmon, K., & Bryant, R. A. (2002). Posttraumatic stress disorder in children: The influence of developmental factors. *Clinical Psychology Review*, 22(2), 163–188. doi:10.1016/S0272-7358(01)00086-1

- Salmond, C. H., Meiser Stedman, R., Glucksman, E., Thompson, P., Dalgleish, T., & Smith, P. (2011). The nature of trauma memories in acute stress disorder in children and adolescents. *Journal of Child Psychology and Psychiatry*, 52(5), 560–570. doi:10.1111/j.1469-7610.2010.02340.x
- Scheeringa, M. S. (2008). Developmental considerations for diagnosing PTSD and acute stress disorder in preschool and school-age children. *The American Journal of Psychiatry*, 165(10), 1237–1239. doi:10.1176/appi.ajp.2008.08070974
- Schmitz, J., Krämer, M., & Tuschen-Caffier, B. (2011). Negative post-event processing and decreased self-appraisals of performance following social stress in childhood social anxiety: An experimental study. *Behaviour Research and Therapy*, 49(11), 789–795. doi:10.1016/j.brat.2011.09.001
- Seih, Y., Chung, C. K., & Pennebaker, J. W. (2011). Experimental manipulations of perspective taking and perspective switching in expressive writing. *Cognition and Emotion*, 25(5), 926–938. doi:10.1080/02699931.2010.512123
- Shanahan, L., Copeland, W., Costello, E. J., & Angold, A. (2008). Specificity of putative psychosocial risk factors for psychiatric disorders in children and adolescents. *Journal of Child Psychology and Psychiatry*, 49(1), 34–42. doi:10.1111/j.1469-7610.2007.01822.x
- Shipman, K. L., & Zeman, J. (1999). Emotional understanding: A comparison of physically maltreating and nonmaltreating mother-child dyads. *Journal of Clinical Child Psychology*, 28(3), 407–417. doi:10.1207/S15374424jccp280313
- Soliday, E., Garofalo, J. P., & Rogers, D. (2004). Expressive writing intervention for adolescents' somatic symptoms and mood. *Journal of Clinical Child and Adolescent Psychology*, 33(4), 792–801. doi:10.1207/s15374424jccp3304_14
- Speltz, M. L., DeKlyen, M., & Greenberg, M. T. (1999). Attachment in boys with early onset conduct problems. *Development and Psychopathology*, 11(2), 269–285. doi:10.1017/S0954579499002059
- Sprung, M., & Harris, P. L. (2010). Intrusive thoughts and young children's knowledge about thinking following a natural disaster. *Journal of Child Psychology and Psychiatry*, 51(10), 1115–1124. doi:10.1111/j.1469-7610.2010.02273.x
- Stallard, P. (2003). A retrospective analysis to explore the applicability of the Ehlers and Clark (2000) cognitive model to explain PTSD in children. *Behavioural and Cognitive Psychotherapy*, 31(3), 337–345. doi:10.1017/S1352465803003084
- Stallard, P., & Smith, E. (2007). Appraisals and cognitive coping styles associated with chronic post-traumatic symptoms in child road traffic accident survivors. *Journal of Child Psychology and Psychiatry*, 48(2), 194–201. doi:10.1111/j.1469-7610.2006.01692.x
- Stokes, D. J., Dritschel, B. H., & Beckerian, D. A. (2004). The effect of burn injury on adolescents autobiographical memory. *Behaviour Research and Therapy*, 42(11), 1357–1365. doi:10.1016/j.brat.2003.10.003
- Sumner, J. A. (2012). The mechanisms underlying overgeneral autobiographical memory: An evaluative review for the CaR-FA-X model. *Clinical Psychology Review*, 32, 34–48. doi:10.1016/j.cpr.2011.10.003
- Sumner, J. A., Griffith, J. W., & Minck, S. (2010). Overgeneral autobiographical memory as a predictor of the course of depression: A meta-analysis. *Behaviour Research and Therapy*, 48(7), 614–625. doi:10.1016/j.brat.2010.03.013
- Sumner, J. A., Griffith, J. W., & Minck, S. (2011). Examining the mechanisms of overgeneral autobiographical memory: Capture and rumination, and impaired executive control. *Memory*, 19(2), 169–183. doi: 10.1080/02699931003741566
- Sutherland, K., & Bryant, R. A. (2007). Rumination and overgeneral autobiographical memory. *Behaviour Research and Therapy*, 45(10), 2407–2416. doi: 10.1037/0021-843X.116.4.837
- Swales, M. A., Williams, J. M. G., & Wood, P. (2001). Specificity of autobiographical memory and mood disturbance in adolescents. *Cognition and Emotion*, 15(3), 321–331. doi:10.1080/0269993004200132

- Sylvers, P. D., Brennan, P. A., & Lilienfeld, S. O. (2011). Psychopathic traits and preattentive threat processing in children: A novel test of the fearlessness hypothesis. *Psychological Science*, 22(10), 1280–1287. doi:10.1177/0956797611420730
- Taylor, L., & Ingram, R. E. (1999). Cognitive reactivity and depressotypic information processing in children of depressed mothers. *Journal of Abnormal Psychology*, 108(2), 202–210. doi:10.1037/0021-843X.108.2.202
- Tran, T. B., Hertel, P. T., & Joormann, J. (2011). Cognitive bias modification: Induced interpretive biases affect memory. *Emotion*, 11(1), 145–152. doi: 10.1037/a0021754
- 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(2), 381–390. doi:10.1037/0012-1649.42.2.381
- Vaish, A., Grossmann, T., & Woodward, A. (2008). Not all emotions are created equal: The negativity bias in social-emotional development. *Psychological Bulletin*, 134(3), 383–403. doi:10.1037/0033-2909.134.3.383
- Valentino, K. (2011). A developmental psychopathology model of overgeneral autobiographical memory. *Developmental Review*, 31(1), 32–54. doi:10.1016/j.dr.2011.05.001
- Valentino, K., Toth, S. L., & Cicchetti, D. (2009). Autobiographical memory functioning among abused, neglected, and nonmaltreated children: The overgeneral memory effect. *Journal of Child Psychology and Psychiatry*, 50(8), 1029–1038. doi:10.1111/j.1469-7610.2009.02072.x
- Van Bergen, P. V., Salmon, K., Dadds, M. R., & Allen, J. (2009). The effects of mother training in emotion-rich, elaborative reminiscing on children's shared recall and emotion knowledge. *Journal of Cognition and Development*, 10(3), 162–187. doi:10.1080/15248370903155825
- Van Minnen, A., Wessel, I., Verhaak, C., & Smcenk, J. (2005). The relationship between autobiographical memory specificity and depressed mood following a stressful life event: A prospective study. *British Journal of Clinical Psychology*, 44(3), 405–415. doi:10.1348/014466505X29648
- Vasey, M. W., Dangleish, T., & Silverman, W. K. (2003). Research on information-processing factors in child and adolescent psychopathology: A critical commentary. *Journal of Clinical Child and Adolescent Psychology*, 32(1), 81–93. doi:10.1207/15374420360533086
- Vrielynck, N., Deplus, S., & Philippot, P. (2007). Overgeneral autobiographical memory and depressive disorder in children. *Journal of Clinical Child and Adolescent Psychology*, 36(1), 95–105. doi:10.1207/s15374424jccp3601_10
- Wainryb, C., Komolova, M., & Florschütz, P. (2010). How violent youth offenders and typically developing adolescents construct moral agency in narratives about doing harm. In K. C. McLean, M. Pasupathi, K. C. McLean, & M. Pasupathi (Eds.), *Narrative development in adolescence: Creating the storied self* (pp. 185–206). New York, NY: Springer Science + Business Media. doi:10.1007/978-0-387-89825-4_10
- Warcham, P., & Salmon, K. (2006). Mother–child reminiscing about everyday experiences: Implications for psychological interventions in the preschool years. *Clinical Psychology Review*, 26(5), 535–554. doi:10.1016/j.cpr.2006.05.001
- Welch-Ross, M. K., Fasig, L. G., & Farrar, M. J. (1999). Predictors of preschoolers' self-knowledge: Reference to emotion and mental states in mother–child conversation about past events. *Cognitive Development*, 14(3), 401–422. doi:10.1016/S0885-2014(99)00012-X
- Wild, J., & Clark, D. M. (2011). Imagery rescripting of early traumatic memories in social phobia. *Cognitive and Behavioral Practice*, 18(4), 433–443. doi:10.1016/j.cbpra.2011.03.002
- Williams, J. M. G., Barnhofer, T., Crane, C., Hermans, D., Raics, F., Watkins, E., & Dalgleish, T. (2007). Autobiographical memory specificity and emotional disorder. *Psychological Bulletin*, 133, 122–148. doi: 10.1037/0033-2909.133.1.122
- Wilson, A. E., & Ross, M. (2001). From chump to champ: People's appraisals of their earlier and present selves. *Journal of Personality and Social Psychology*, 80(4), 572–584. doi:10.1037/0022-3514.80.4.572

- Wisco, B. E., & Nolen-Hoeksema, S. (2010). Valence of autobiographical memories: The role of mood, cognitive reappraisal, and suppression. *Behaviour Research and Therapy*, 48, 335–340. doi: 10.1016/j.brat.2009.11.009
- Wood, A. M., & Tarric, N. (2010). Positive clinical psychology: A new vision and strategy for integrated research and practice. *Clinical Psychology Review*, 30(7), 819–829. doi:10.1016/j.cpr.2010.06.003
- Zupan, B. A., Hammen, C., & Jaenicke, C. (1987). The effects of current mood and prior depressive history on self-schematic processing in children. *Journal of Experimental Child Psychology*, 43(1), 149–158. doi:10.1016/0022-0965(87)90056-7

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