

The development of personality disorders: Perspectives from normal personality development in childhood and adolescence

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Abstract

The developmental pathways leading to personality disorders are poorly understood, but clues to these pathways come from recent research on personality disorders and normal personality development in childhood and adolescence. The first section of this paper reviews recent work on personality disorders in childhood and adolescence, and concludes that personality disorders in adolescence are already prevalent, moderately stable, and impairing. The second section draws on McAdams and Pals' personality model to offer a taxonomy of personality differences that can account for the known patterns of emerging personality pathology. This taxonomy includes youths' temperament and personality traits, mental representations (including attachment), coping strategies, and narrative identities. Individual differences in all of these domains may play critical roles in the development, manifestation, and course of personality disorders. Existing knowledge of normal and abnormal personality development can inform future research on the developmental pathways leading to personality pathology, the diagnostic criteria for personality disorders, and the development of validated treatments for personality disorders in the first two decades of life.

Like adults, children and adolescents sometimes face serious difficulties in their lives because of their personalities. Youths' personalities may significantly interfere with their day-to-day functioning or may cause them internal distress and misery. Some youths' personality difficulties become impairing enough that psychological treatment is warranted; in these cases, the children and adolescents could rightly be considered as having personality disorders (PDs). Other youths may not warrant treatment, but their personalities may set them on a pathway that could lead to significant problems in adulthood.

Over the last decade, it has become increasingly clear that personality pathology does occur

in youths and the pathways leading to adult PD sometimes begin in childhood (Bleiberg, 2001; Cohen & Crawford, 2005; Geiger & Crick, 2001; Johnson, Bromley, Bornstein, & Sneed, 2006; Johnson, Bromley, & McGeoch, 2005; Kernberg, Weiner, & Bardenstein, 2000; Merielde, De Clercq, De Fruyt, & van Leeuwen, 2005; Shiner, 2007; Westen & Chang, 2000). There is especially convincing evidence for the childhood and adolescent manifestations of antisocial PD, particularly in the form of psychopathic personality traits in youths (Blair & Viding, 2008; Lynam & Gudonis, 2005). However, other types of PDs and forms of personality pathology have received research attention as well. As reviewed later in this piece, the evidence to date makes it clear that PDs in youths are about as prevalent and stable in adolescents as in adults. Further, adolescent PDs are impairing and put youths at risk for later problems in a number of important life domains. To ignore the presence of personality pathology in youths

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is to fail the many young people whose personality difficulties put them at risk of poor functioning both in the present and in the future.

Unfortunately, far less is known about the origins of PDs in youths and adults than is known about the pathways leading to other major psychological disorders (Hill, 2008; Widiger & Trull, 2007). Much of the early clinical interest in PDs in the 20th century arose from rich, complex psychodynamic theories about the origins of such disorders. Most of these etiological theories were developed based on clinicians' discussions with their patients about their early histories. Although these theories have spurred interest in PDs and have provided a basis for interventions, relatively little is known empirically about the developmental pathways leading to PDs (with the exception of antisocial PD, which has a diagnostic counterpart in childhood conduct disorder). There is much that remains to be learned: what form does personality pathology take earlier in life? What are the processes through which youths' personalities lead to problems in important developmental tasks, such as the formation of intimate relationships and the development of skills for work? What are the processes that lead some youths with personality difficulties to improve in the transition to adulthood, whereas others find that their personality problems become increasingly entrenched?

This paper makes the case that in order to prevent and treat PDs in youths and adults it is important to begin with a clear understanding of how personality develops in both positive and negative directions in childhood and adolescence. An important tenet of the developmental psychopathology framework is that the study of normal processes can inform our understanding of pathological processes, and the study of pathological processes can inform our understanding of normal processes (Cicchetti, 1993). This approach has proven fruitful in the study of many disorders, including autism and attention-deficit/hyperactivity disorder (Hinshaw, 2008). Taking this approach, we need not start from scratch in our investigations of the developmental pathways leading to PDs. As reviewed later in this paper, PDs do not represent discrete, categorical conditions that are clearly distinct from each other or from normal functioning. Rather, like most other pathological conditions (Beauchaine, 2003), personality pathol-

ogy is better understood as representing extreme manifestations of underlying continuous dimensions. Thus, in the case of PDs, we can focus on the underlying personality processes that have gone awry. We can draw on existing models and research on personality development to formulate hypotheses about how PDs develop.

The relevance of work on normal personality development to our understanding of PDs is presented in two sections. The first section reviews recent work on PDs in childhood and adolescence to establish what findings need to be explained by any convincing model for PDs. The second section offers a taxonomy of personality differences in childhood and adolescence that can be used as a starting point for describing and explaining personality pathology in youths. The personality differences are organized according to a model developed by McAdams and Pals (2006; see also McAdams, 1995). This model divides personality into three broad domains: personality traits, characteristic adaptations, and personal narratives. The section makes the case that each of these domains of personality is critical for explaining the origins, manifestations, and course of personality pathology. Theoretical models of the development of PD have tended to emphasize one domain over another, for example, the role of deviant personality traits or the role of attachment. However, given the complexity of personality and its development, no single model alone is likely to account for the development of PDs. The section concludes by pointing to the ways that our existing knowledge of personality development can be used to direct future research on the causes and treatment of personality pathology in youths. The final section highlights the need to delineate the processes through which PDs emerge and become entrenched, and the likelihood of multifinality and equifinality in the development of personality pathology is emphasized. The conclusion describes the ways that research on personality processes may inform the development of validated treatments for PDs in youths.

Overview of Recent Research on PDs in Youths

As noted in the introductory section, recent work on PDs in childhood and adolescence has estab-

lished that personality pathology does exist prior to adulthood and predicts adult functioning. This section reviews some of the most important findings from this work in young people: the prevalence and stability of PDs and symptoms, the risks associated with adolescent PDs, and the dubious categorical status of personality pathology in adolescence. Taken together, this recent research highlights several key findings that will need to be addressed by any model claiming to explain the development and course of personality pathology in the first two decades of life.

The prevalence and stability of PDs and symptoms in adolescence

How common and stable are PDs in youths? It is difficult to estimate the prevalence of PDs, because adequate epidemiological studies are lacking. For adolescents and adults, the best available estimates of PD rates derive from representative community or primary care samples. Among adolescents, prevalence estimates for having at least one PD have ranged from 6% to 17%, with a median prevalence of 11% (Johnson, Bromley, Bornstein, & Sneed, 2006). Comparable large-scale studies of adults suggest prevalence rates of approximately 10% to 15% for at least one PD, and 1% to 2% for each specific PD diagnosis (Mattia & Zimmerman, 2001; Torgersen, 2005). Thus, based on these samples, PDs appear to be as prevalent in adolescence as in adulthood. In fact, PD traits and diagnoses may actually be more prevalent earlier in adolescence than during later adolescence, at which point prevalence appears to be quite comparable to that seen in adulthood (Johnson, Bromley, et al., 2006).

Even if PDs are as common in adolescence as they are in adulthood, it is possible that they should be of less concern if they are typically unstable earlier in life. Therefore, it is also important to consider how stable PD symptoms and diagnoses are in adolescence. A number of recent longitudinal studies have examined several different kinds of stability in PD diagnoses and symptoms in both youths and adults. First, *rank-order stability* refers to the degree to which the relative order of individuals on a given trait or symptom is maintained over time, and it is typically measured through test–retest correlations on dimensional scores of some trait across two

points in time. PD symptoms in adolescents and young adults display moderate levels of rank-order stability across time, often in the range of .40 to .65 (Cohen, Crawford, Johnson, & Kasen, 2005; Johnson, Bromley, et al., 2006). This moderate stability is similar to the stability seen in adult samples (Grillo & McGlashan, 2005). Second, *mean-level change* refers to increases or decreases in the average trait level of a population as a whole. This type of change recognizes that, on average, people may go up or down in their levels of different traits or symptoms. In terms of mean-level change, average levels of PD symptoms appear to peak in early adolescence and then decline across the years of later adolescence and early adulthood (Cohen et al., 2005; Johnson, Bromley, et al., 2006).

Third, the *stability of PD diagnoses* over time addresses the continuity of categorical diagnoses. In other words, if a person meets criteria for a particular PD, is it likely that the person will still warrant that diagnosis over time? The stability of particular PD diagnoses appears to be modest, among both adolescents and adults (Clark, 2007; Cohen et al., 2005; Grillo & McGlashan, 2005; Johnson, Bromley, et al., 2006; Skodol et al., 2005; Zanarini, Frankenburg, Hennen, Reich, & Silk, 2005). The relatively modest stability of PD diagnoses stems from at least two causes. Because PD diagnoses are made in a categorical, all-or-none fashion, a previously diagnosed person can appear to have remitted simply by falling under the threshold for diagnosis by a single symptom. In addition, the high remission rates also reflect an interesting personality process. Among adults, there seem to be more and less stable aspects of PDs (Skodol et al., 2005; Zanarini et al., 2005). Acute behaviors, such as odd behavior or self-harm, often resolve more quickly, whereas the underlying personality traits remain more stable (McGlashan et al., 2005). Clark (2007) nicely summarized the findings on the various kinds of stability thus: “. . . it isn’t until past the age of 50 that character may set like plaster; before, it’s more like being set in clay—change can occur, but gradually and with effort” (p. 242).

Risks associated with PDs in adolescence

Given the findings on prevalence and stability, it is important to consider whether there are

risks associated with early manifestations of PDs. PDs leave youths vulnerable to the development of a variety of risky and harmful behaviors. Specifically, adolescent PDs predict risks for adolescent and adult violence and law breaking (Johnson et al., 2000), heightened rates of suicidal ideation or attempts in early adulthood (Johnson et al., 1999), and high numbers of sexual partners and high-risk sexual behaviors (Lavan & Johnson, 2002). Self-mutilation may also be present in youths with PDs, and may take the form of cutting, burning, or punching oneself. Further, adolescent PDs are associated with risks for problems with adaptation, both concurrently and into adulthood. The transitional period from late adolescence to adulthood requires youths to face many new developmental tasks, including the establishment of stable romantic relationships, the negotiation of new relationships with family members, the completion of schooling for some, and the cultivation of skills for work (Roisman, Masten, Coatsworth, & Tellegen, 2004). PDs and traits make these developmental tasks more challenging for many youths. Personality pathology in adolescence predicts later conflicts with family members and problems with romantic relationships (Johnson, Bromley, et al., 2006), as well as difficulties in friendships, few social activities, poor educational achievement, and work difficulties (Bernstein et al., 1993; Johnson, First, et al., 2005). In fact, the risks for later impairment well into adulthood are as high for Axis II disorders as for Axis I disorders in adolescence (Crawford et al., 2008); the combination of Axis I and Axis II disorders in adolescence is even more problematic for adult outcomes. The more persistent PDs are in adolescence, the greater the adaptive impairment in adulthood is likely to be (Skodol, Johnson, Cohen, Sneed, & Crawford, 2007).

Despite the seemingly gloomy picture for adolescent PDs, it is important to recognize that not all youths in the community with PDs suffer clear-cut impairment (Cohen et al., 2005; Johnson, First, et al., 2005). Fortunately, some youths with PDs improve in their functioning as they age (Cohen et al., 2005). There appear to be transactions between youths' PD symptoms and their adaptation. Although PD symptoms pose risks for youths' development,

positive adaptation in school and in relationships can lead to improvements in some PD symptoms over time (Skodol, Bender, et al., 2007). Conversely, problems with adaptation are likely to perpetuate PD symptoms. For example, young adults who perpetrate partner violence are less likely to experience the positive declines in PD symptoms that occur normatively during this span of life (Ehrensaft, Cohen, & Johnson, 2006). The interaction between personality pathology and impairment is likely to be complex and requires further investigation.

Comorbidity in PDs

In the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV;* American Psychiatric Association [APA], 1994), the PDs are conceptualized as categories, meaning distinct patterns that differ qualitatively both from normal personality functioning and from each other. The validity of this categorical system has been challenged on a number of fronts (reviewed in Clark, 2007; Trull & Durrett, 2005; Widiger & Trull, 2007). Comorbidity appears to be the rule rather than the exception for PDs. There is a high rate of comorbidity among the PDs in adults (Skodol, 2005) and in adolescents (Cohen et al., 2005). The PDs co-occur within patients at a rate that is much higher than would be expected if the disorders truly are distinct, categorical entities with distinct etiologies. The existing PD diagnoses also do not adequately cover the full range of personality pathology. The *DSM-IV* provides the option of diagnosing PD not otherwise specified (PD-NOS), for those cases in which the general criteria for a PD are met and PD symptoms are present, but in which the person does not fulfill the criteria for any specific PD in the manual. PD-NOS turns out to be the most common PD diagnosis used in actual practice with adults (Verheul & Widiger, 2004), and it may be the most prevalent PD in both adolescents and adults (Johnson, First, et al., 2005). The frequent occurrence of comorbidity among the PDs and of the PD-NOS diagnosis call into question the validity of the PD diagnoses as discrete categories.

Similarly, Axis I and Axis II disorders are highly comorbid in both adults (Dolan-Sewell,

Krueger, & Shea, 2001) and adolescents. All three clusters of PDs in adolescents show high rates of comorbidity with Axis I disorders, including depressive, anxiety, substance use, and disruptive behavior disorders (Cohen et al., 2005). Further, earlier Axis I disorders predict heightened risk for later emergence and continuation of Axis II disorders into adulthood (Cohen et al., 2005; Lewinsohn, Rohde, Seeley, & Klein, 1997). The reverse is true as well: earlier Axis II disorders predict greater risk for early adult Axis I disorders, even after taking into account the presence of earlier Axis I and II disorders (Cohen et al., 2005; Daley et al., 1999). As with PDs and adaptation, it appears that there is often a transaction between Axis I and Axis II disorders across the years from adolescence to adulthood, with Axis I disorders contributing to the expression of Axis II disorders and vice versa. These high rates of overlap between Axis I and Axis II conditions suggest that the two axes are not nearly as distinct as originally conceived.

The emerging picture of personality pathology in adolescence

A complex picture of personality pathology is emerging from this recent work on PDs in adolescence. Although strong epidemiological data are lacking, the best research to date estimates that approximately 1 in 10 adolescents is likely to meet diagnostic criteria for a PD. In fact, PDs appear to be as common in adolescence as in adulthood, and, if anything, the average level of PD symptoms may be higher in adolescence than in adulthood. PD symptoms also show moderate rank-order stability by adolescence, just as they do in adulthood, which suggests that, for many youths, these symptoms are not merely transient aspects of adolescence.

In addition, adolescent PDs are associated with risks for concurrent and future difficulties in many areas, including heightened rates of risky behaviors (violence, suicide, risky sexual behavior) and impairment in relationships, school, and work. All of these same co-occurring problems are associated with PD-NOS in adolescents as well (Johnson, First, et al., 2005). A particularly striking finding is that Axis II diagnoses are as predictive as Axis I

disorders of future impairment, even two decades later. Although PDs do appear to improve with age for some adolescents, the outcomes associated with these disorders can be quite serious for many youths. For some adolescents, there is likely to be a transactional process in which PD symptoms, poor life adaptation, and Axis I disorders mutually influence each other; PD symptoms fuel increasing problems with Axis I disorders and problems in development tasks, which in turn, increase PD symptoms. All of these findings highlight the importance of understanding the pathways leading to personality problems in adolescence. Adolescence seems to represent a critical juncture in the emergence of persistent personality pathology.

The other important theme that emerges from current work is the necessity of understanding the personality processes that underpin PD symptoms and impairment. The high levels of comorbidity among PD diagnoses and between Axis I and Axis II disorders are likely to arise because the same fundamental psychological processes are influencing the development of all of these disorders. Specifically, it is increasingly recognized that comorbidity may often be caused by personality dimensions that underlie both Axis I and Axis II disorders (Clark, 2005, 2007). These personality dimensions can account for the overlap among PDs and for the cases in which individuals are diagnosed with PD-NOS. The probable personality dimensions will be described in more detail in the next section.

The research on the relatively weak stability of the PD diagnoses also highlights the crucial role of the personality dimensions that underlie PDs. Although the PDs themselves are less stable than expected in both adolescents and adults, the underlying personality traits are still considerably stable. The impairment that accompanies PDs is likewise stable (Clark, 2007). Thus, at times people with PDs may experience acute periods of painful and bothersome symptoms, which resolve relatively more rapidly, whereas the underlying problems with personality processes and adaptive impairment persist over time. Taken together, the research on PDs in youths points to the importance of understanding the personality processes that become increasingly problematic

during the years from childhood through the transition to adulthood.

A Taxonomy of Personality Differences Relevant to PDs in Youths

What aspects of personality are essential for a complete model of PDs?

This section presents a framework for thinking about the personality processes that are most important for explaining the development, manifestations, and course of PDs. The focus is largely on personality processes in youths, but these processes are relevant for understanding PDs in adults as well. These personality processes need to account for the key findings of the current research on PDs in youths: the high prevalence of PDs and high levels of PD symptoms in adolescence, the moderate stability of PD symptoms by the adolescent years, the negative impact of PDs on youths' functioning over time, and the high rates of comorbidity found in adolescent PDs.

The *DSM-IV* articulates a framework for the basic features of a PD. According to this general framework, PDs consist of deviant patterns of inner experience and behavior in at least two of the following four areas: "(1) cognition (i.e., ways of perceiving and interpreting self, other people, and events); (2) affectivity (i.e., the range, intensity, lability, and appropriateness of emotional response); (3) interpersonal functioning; (4) impulse control" (APA, 1994, p. 633). *Cognition* typically manifests as disturbances in how patients view themselves, others, and the world. *Affectivity* involves a wide range of disturbances in patients' typical emotions, including both restricted emotional experience and excessively intense and labile emotions. Difficulties in *interpersonal functioning* typically involve problems with one or both of the two main dimensions of interpersonal behavior: agency (ranging from dominance and self-assuredness to submission) and communion (ranging from affiliation and warmth to detachment and cold-heartedness; Wiggins & Trobst, 1999). Finally, several PDs involve problems with *impulse control*: either deficits in self-control or excessive levels of self-restraint and inhibition of healthy impulses. These patterns

are expected to be enduring, inflexible, and pervasive across many contexts in the person's life. As previously noted, current research calls into question this final requirement.

Thus, any theoretical model of the PDs must account for a wide range of problematic behaviors, thoughts, and emotions. This section uses a framework developed by McAdams and Pals (2006; see also McAdams, 1995) to flesh out the personality processes that seem especially important for this task of explaining the development of PDs in childhood and adolescence. McAdams and Pals' model divides personality into three broad domains. First, the *dispositional signature* includes the personality traits that people express in their behaviors, thoughts, and emotions with some consistency across situations and over time. Second, *characteristic adaptations* include "a wide range of motivational, social-cognitive, and developmental adaptations" that are specific to a particular time, place, or role (McAdams & Pals, 2006, p. 208). These characteristic adaptations differ from traits in that their instantiation is more specific to particular life contexts. Third, by adolescence people begin to form *personal narratives*, stories about their lives that help them to make sense out of their identities over time. Aspects of the three domains may influence the development of other domains; for example, traits may influence the kinds of narratives people are prone to develop. However, McAdams and Pals emphasize that none of the domains can be reduced to the others; each adds something unique to the full understanding of personality.

Children clearly manifest both dispositional signatures (or traits) and a wide range of characteristic adaptations, and many youths begin to develop personal narratives in adolescence (Shiner, in press). There is an increasingly rich research literature on all of these personality processes, although the depth of knowledge varies across particular processes. For all of these early personality processes, we have some understanding of their impact on youths' development and the environmental influences that contribute to their development. For some of these processes, we also have information on their genetic basis, their stability over time, and the processes that contribute to change. The

following subsections attempt to show how these personality processes both account for known patterns in PD development and illuminate developmental issues that have received less attention.

Normal-range and pathological personality traits

Normal-range personality traits in childhood and adolescence. In McAdams and Pals' model (2006), the dispositional signature consists of people's general tendencies to behave, think, and feel in relatively consistent ways across situations and across time. In other words, these are the general tendencies known by experts and laypeople alike as "personality traits." These traits may reflect individual differences in biological systems that have been selected through evolution and are shaped by individuals' life experiences (Nettle, 2006). There are a number of biological systems that are relevant for personality functioning and that are crucial for human survival; for example, systems supporting the detection of rewards and threats, achievement of social dominance, striving after long-term goals, nurturance of the young, aggression, and exploration of new environments. According to some evolutionary theories (MacDonald, 1995; Nettle, 2006), although such biological systems are part of the human makeup, people vary in the strength and expression of such systems. Individuals' life experiences create further variations in the expression of these systems, which eventually become manifest in personality traits.

From a developmental viewpoint, traits are the earliest appearing aspect of personality. Temperamental differences in positive and negative emotions, activity, and attention emerge in the first year of life (Rothbart & Bates, 2006). As children grow, they develop new capacities in terms of motor skills, language, cognition, and emotion, and the traits they can display similarly become broader and more complex. Some of the new traits have clear counterparts in early temperamental traits. Both early temperament and later personality traits include traits indexing positive emotions, high energy, and sociability; traits tapping a wide variety of negative emotions, vulnerability, and stress re-

activity; and traits measuring behavioral constraint, self-regulation, and persistence (De Pauw, Mervielde, & Van Leeuwen, 2009; Shiner & DeYoung, in press). Other personality traits that emerge later in childhood express newly developing individual differences in empathy, aggression, flexibility, exploration, and creativity. Both temperamental traits and later personality traits are moderately influenced by genetic factors (Krueger & Johnson, 2008; Saudino, 2005).

There is now convincing evidence that, at least by the school-age years, children's personality traits are structured much like adults' traits. Both children and adults exhibit five major personality traits: extraversion, neuroticism, conscientiousness, agreeableness, and openness to experience (Caspi & Shiner, 2006; John, Naumann, & Soto, 2008; Shiner & De Young, in press). These "Big Five" traits provide a rich picture of children's individuality and reflect underlying biological processes. *Extraversion* measures children's tendencies to be sociable, expressive, high spirited, socially potent, and energetic versus shy, reserved, and lethargic. This trait appears to reflect individual differences in a biologically based approach system that activates behavior to seek rewards (DeYoung & Gray, in press). *Neuroticism* indexes children's susceptibility to negative emotions and general distress. Children and adolescents who are high on neuroticism are described as anxious, vulnerable, tense, easily frightened, "falling apart" under stress, guilt-prone, moody, low in frustration tolerance, and insecure in relationships with others. Neuroticism appears to index individual differences in biological systems that promote behavioral responses to threats (DeYoung & Gray, in press).

Conscientiousness and agreeableness both tap important aspects of self-regulation. Highly conscientious children and adolescents are described as responsible, attentive, persistent, orderly and neat, planful, possessing high standards, and thinking before acting, whereas low conscientiousness manifests itself in more careless, impulsive, and distractible behavior. The self-regulatory traits that are part of conscientiousness are related to children's maturing attentional skills and abilities to focus on long-term goals over immediate impulses and are likely

to be related to developments in the lateral prefrontal cortex (DeYoung & Gray, in press) and anterior cingulate gyrus (Posner, Rothbart, Sheese, & Tang, 2007). Agreeableness relates more clearly to self-regulation in service of maintaining positive relationships with others. Agreeableness describes individual differences in empathy, kindness, and willingness to accommodate others' needs, as well as inhibition of hostile and aggressive impulses. Agreeableness is likely to involve brain circuits related to empathy and social information processing (DeYoung & Gray, in press). Finally, children high on *openness to experience* are described as eager and quick to learn, perceptive, imaginative, curious, and original, whereas children low on this trait exhibit lower levels of fantasy, creativity, and interests. This trait appears to reflect individual differences in the motivation to explore and to seek and attend to internal and external sensory stimulation (Caspi & Shiner, 2006).

How stable are personality traits? Again, we need to consider the different kinds of stability to answer this question. As for rank-order stability, children's traits show some stability by preschool, and then the stability gradually increases over time (Roberts & DelVecchio, 2000). Already by adolescence, personality traits are moderately stable. These results dovetail with the moderate stability found for PD symptoms in adolescence. As for mean-level stability, neuroticism increases during adolescence and then decreases in young adulthood (Roberts, Walton, & Viechtbauer, 2006). Agreeableness and conscientiousness are at their lowest levels in adolescence and then increase in young adulthood and middle age. Many PDs are characterized by high neuroticism and low agreeableness and conscientiousness. Therefore, given the findings on mean-level personality trait change, it is not surprising that PD symptoms peak in adolescence and later improve. Across the late adolescent and early adult years, there is a movement toward greater personality maturity on average. This positive growth is accounted for in part by young adults' greater investment in socially important roles as spouses or partners, workers, and parents (Lodi-Smith & Roberts, 2007). However, it is important to recognize that not all people benefit from this growing personality

maturity as they enter adulthood (Roberts, Wood, & Caspi, 2008). Rather, some people show changes in their personality traits in more negative directions. People who lack normative experiences with adult roles may be particularly vulnerable to such negative changes in personality (Roberts et al., 2008). Given that PDs in adolescence put youths at risk for problems with developmental tasks in the transition to adulthood, it is likely that youths struggling with personality pathology may sometimes miss out on the beneficial effects of adopting more adult roles.

Pathological personality traits. The temperamental and personality traits reviewed thus far describe personality processes that are relevant to understanding personality pathology. These normal-range traits reflect early variations in children's affect, interpersonal styles, self-control, and perceptions of selves and others, the four disturbed aspects of personality characterizing PDs. Even more compelling evidence for the role of personality traits in PD development comes from work on pathological personality dimensions in adults and children. Research in adults suggests that personality pathology represents maladaptive variants of most of the Big Five traits (Clark, 2007; Livesley, 2007; Markon, Krueger, & Watson, 2005; Trull & Durrett, 2005; Widiger & Simonsen, 2005). Recent work has converged on the same basic pathological personality dimensions to describe PD symptoms in children and adolescents (De Clercq, De Fruyt, Van Leeuwen, & Mervielde, 2006; De Clercq, De Fruyt, & Widiger, in press).

The pathological personality dimensions found in children, adolescents, and adults are as follows. First, at the pathological extremes, *extraversion versus introversion* taps exhibitionism (high end) and detachment, social avoidance, and excessive shyness (low end). Second, *antagonism versus compliance*, a trait reflecting low agreeableness, measures mistrust and alienation, aggression, entitlement, and callousness at the pathological high end. Third, a pathological variation of conscientiousness, *constraint versus impulsivity* taps compulsivity and workaholism (high end) and impulsiveness, irresponsibility, and excessive risk taking (low end). Fourth, at the pathological high end

of *emotional dysregulation versus emotional stability* (neuroticism), individuals exhibit anxiousness, insecure attachment, identity problems, affective lability, feelings of worthlessness, and poor coping with stress. It is not clear whether there is a pathological low end, but it is possible that it may involve an excessive lack of fear and anxiety (as in psychopathy). It may be necessary to add a fifth dimension to the four typically found: *peculiarity*, a dimension measuring odd beliefs, odd behavior, and perceptual aberrations, may be needed to account for Cluster A PD traits (Tackett, Silberschmidt, Krueger, & Sponheim, 2008).

Intriguing new behavior genetic research has provided further convincing evidence for the importance of these pathological personality dimensions in the development of PDs. In a study of young adults, three genetic risk factors for the *DSM-IV* PD symptoms were identified (Kendler et al., 2008): first, one accounting for the general risk for PDs (interpreted by the authors as, most likely, a propensity for negative emotionality); second, one influencing high impulsivity and low agreeableness; and third, one shaping high introversion. These three genetic risk factors map onto several of the pathological personality traits noted above, namely, emotional dysregulation, antagonism and impulsivity, and introversion. In addition, three person-specific or nonshared environmental factors accounted for the associations among the disorders within each of the three clusters of PDs (Clusters A, B, and C). In other words, similar person-specific environmental factors influenced all of the disorders within each cluster. More specific genetic and person-specific or nonshared environmental factors contributed to each of the PDs. These results thus point to three important areas for future investigation: the developmental influences on the basic pathological personality dimensions, the environmental factors that shape disorders within the three clusters, and the specific genetic and environmental sources of variation in more narrowly defined aspects of personality pathology.

Implications of normal and pathological personality traits in childhood and adolescence. Any good model of PD development will need to account for the pathological develop-

ment of personality traits. Children manifest genetically influenced traits from the earliest days of life, and these traits expand to include the Big Five personality traits, most likely by the preschool years, but most certainly by the school-age years. These normal-range traits encompass much of the content of the PD symptoms, including variations in typical emotions, views of the self and others, impulsivity and self-control, and relationship styles. Further, the findings on stability for normal-range personality traits mirror the patterns seen for PD symptoms in the adolescent and early adult years. A set of pathological personality traits can account for much of the variation in PD symptoms in both children and adults, and genetic factors seem to account for the structure of these pathological dimensions. All of these traits have profound implications for children's healthy and unhealthy development, because these traits shape the ways that children interpret and react to their experiences, evoke responses from other people, and "select" the environments they experience repeatedly (Caspi & Shiner, 2006; Rothbart & Bates, 2006). These temperamental and personality traits likely form a foundational basis for the development of personality pathology. To understand how PDs develop, it will be essential to trace the pathways through which children who are predisposed to more challenging traits develop in increasingly deviant ways over time.

Characteristic adaptations

What do characteristic adaptations add to our understanding of PDs? Clearly, children's developing personality traits are important for their development. However, traits are only one aspect of children's emerging personalities. Another rich, complex aspect of children's individuality is what McAdams and Pals (2006) call "characteristic adaptations": "a wide range of motivational, social-cognitive, and developmental adaptations, contextualized in time, place, and/or social role" (p. 208). Rather than being general tendencies expressed across a wide variety of situations and over time, these aspects of personality are more specific to particular life contexts, including the domain in question, the role the person is in, and the person's specific

developmental phase in life. To illustrate the context-dependent nature of characteristic adaptations, consider the case of a young adolescent girl and the goals she is pursuing. She may have one set of goals for her academic work (e.g., to master the material and to get good grades) and another set of goals for her relationships with peers (e.g., to find close friendships and to be well liked by peers). Even within the domain of intimate relationships, she may have different goals, depending on her role as friend, child, or student. Her goals are likely to shift as she moves into later adolescence, when she may begin to pursue the goals of preparing for college or establishing a first romantic relationship. McAdams and Pals argue that characteristic adaptations are likely to be more influenced by culture and to evidence more change over time than personality traits, because of their context-dependent nature. McAdams and Pals also suggest that characteristic adaptations may be good targets for intervention, given that they are likely to be more inherently changeable over time.

Characteristic adaptations provide a useful complement to traits in explaining the development of PDs. Traits help to explain some of the basic, genetically influenced tendencies youths may struggle with, including problems with emotion regulation, self-control, accurate perception of self and others, and relationships. Characteristic adaptations help provide a detailed, nuanced picture of the more circumscribed processes that underpin the development and manifestations of personality pathology. Several characteristic adaptations are likely to be important additions to any model for the development of PDs; two of them are focused on here. First, youths' *mental representations* help account for some of the problems with cognition seen in PDs, including problematic perceptions, interpretive biases, and views of the self. Second, youths' *coping strategies* can explain ineffective means of handling stressful daily events, intense emotional experiences, and more long-term challenges. Other characteristic adaptations are likely to be important in PD development, but these two have particularly strong support.

Mental representations. "Mental representations" consist of the many ways that children and adolescents perceive and think about their

experiences of themselves, other people, life events, and their more general environment. In PDs, problems with mental representations typically manifest as disturbances in how people view themselves and others; for example, overinflated self-views or unduly negative views of the self, profound mistrust or alienation toward others, or tendencies to idealize or devalue others (Skodol, 2005). Cognition also includes deviant thinking about the world, such as expectations for perfectionism, black-and-white thinking, or odd, delusional beliefs. Mental representations may be consistently accompanied by particular sets of emotions that are evoked when the mental representation operates (Greenberg, Elliott, & Lietaer, 2003). These mental representations are a primary means through which individuals' earlier experiences are brought forward into the present (Dweck & London, 2004).

The mental representation that has received the most research attention to date in work on PDs is attachment. As noted previously, clinical interest in PDs arose in part from complex, theoretically rich psychodynamic accounts of their origins in disturbed parent-child relationships. Research on attachment disturbance in PDs continues this psychodynamic tradition using empirical methods.

According to attachment theory and research, children begin to develop patterns of security versus insecurity in the context of their earliest close relationships, typically with parents (Mikulincer & Shaver, 2007). Through these early relationships, children develop mental representations of who they are in relation to others and of the availability and responsiveness of others in times of stress and need. Like children, adults vary in their attachment representations of romantic relationships (Fraley & Shaver, 2008). Among both children and adults, attachment styles vary along two dimensions: first, whether the person worries about the availability and responsiveness of the partner versus trusting in that availability, and second, whether the person prefers independence and detachment from others versus comfortably accepting intimacy and support (Fraley & Shaver, 2008). Early attachment experiences predict adult attachment, but other life experiences and beliefs contribute to later

attachment styles as well (Mikulincer & Shaver, 2007). Although attachment styles are associated with the Big Five traits (e.g., anxious attachment is associated with neuroticism), they add information about personality dynamics that are not accounted for by traits (Fraley & Shaver, 2008).

Attachment styles show meaningful, coherent associations with various PDs in adolescence and adulthood (Crawford et al., 2006; Westen, Nakash, Thomas, Bradley, 2006). For example, adolescents diagnosed with borderline PD have attachment styles characterized by worries about rejection and abandonment, as well as incoherent, disorganized representations of close relationships (Westen et al., 2006). Attachment styles show moderate continuity from adolescence into adulthood (Crawford et al., 2006), and therefore have the potential to have long-lasting effects on youths' developing relationships. During adolescence and early adulthood, youths are faced with the task of establishing increasingly intimate relationships with both peers and potential romantic partners; attachment representations may thus become increasingly important during the transition to adulthood (Sroufe, Carlson, Levy, & Egeland, 1999). The increased demands on capacities for attachment may overwhelm some youths; the stressful negotiation of new intimate relationships may be another reason why PD symptoms peak in the adolescent years.

Attachment thus shows great promise as one model for mental representations in PDs. However, the problematic mental representations seen in PDs go beyond attachment representations and include many other aspects of social-cognitive functioning (Geiger & Crick, 2001). For example, children vary in their feelings of alienation from others and assumptions about whether peers have hostile intentions (Leff et al., 2006), their beliefs about what they can offer to others (Rudolph, Hammen, & Burge, 1995), their attributional styles for life events (Mezulis, Hyde, & Abramson, 2006), and their beliefs about the malleability of their own behavior (Molden & Dweck, 2006). There is interesting evidence that some mental representations may be particularly influenced by life experiences (Gregory et al., 2007; Mezulis et al., 2006) and may be less influenced by genetic factors than are traits (Gregory

et al., 2007). Much more needs to be known about the wide variety of children's mental representations, their origins, and their impact on youths' development (Olson & Dweck, 2008).

Coping strategies. Children develop different strategies for coping with the stresses that they face. There is increasing consensus about the basic structure of coping strategies used by youths and adults (Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000; Compas, Connor-Smith, Saltzman, Thomasen, & Wadsworth, 2001). At the highest level, coping strategies are divided into those that involve *engagement* (approach-oriented, active strategies for handling stressors) and those that involve *disengagement* (avoidance-oriented attempts at distancing oneself from the stressor). Within the engagement strategies, some coping methods involve more direct attempts to control the stressor or one's response to it (e.g., problem solving, seeking support, regulating emotions), and other methods involve secondary adaptation to the stressor (e.g., distraction, cognitive restructuring). Disengagement strategies include many different avoidant coping behaviors, such as denial, wishful thinking, withdrawal, and substance use. Coping also can include a variety of nonconscious strategies, such as defense mechanisms, which serve to protect people from negative emotions (Cramer, 2008).

Coping strategies develop over time. Among preschool- and school-age children, the predominant forms of coping are support seeking, problem solving, escape, and distraction (Skinner & Zimmer-Gembeck, 2007). As children move into adolescence, their repertoire of coping strategies becomes more complex and cognitively advanced; some of these new skills are helpful, such as using cognitive restructuring. However, there are also adolescent increases in some less adaptive coping strategies, such as rumination, aggression, and blaming others. Youths do not develop some of the most helpful mature strategies until late adolescence or early adulthood; these strategies involve more advanced cognitive skills in planning and strategizing (Skinner & Zimmer-Gembeck, 2007). Thus, adolescence is an important transitional period, as youths work to find new coping strategies for the new challenges that they face.

Difficulties with coping are an important part of both normal and pathological personality development. Problems with coping are part of the explicit diagnostic criteria for some of the *DSM-IV* PDs. For example, borderline PD includes behaviors indicating poor coping with stressful emotions, for example, through substance use or self-harming behavior. Avoidant PD can involve withdrawal from work as an avoidant means of coping with social anxiety. Even though poor coping is not part of the diagnostic criteria for all of the PDs, it likely plays a part in the development of all personality pathology. Certain types of coping are generally more versus less effective for youths. Engagement coping strategies are generally associated with better adjustment than are disengagement strategies (Compas et al., 2001). The chronic use of poor coping strategies is likely to lead to both acute symptoms and long-term impairment. Further, psychological symptoms predict increases in stressors over time for children and adolescents (Grant, Compas, Thrum, McMahon, & Gipson, 2004). Youths with emerging personality pathology most likely generate high levels of stress for themselves, which may exacerbate underlying problems with coping. The combination of high neuroticism and low conscientiousness, a common combination in individuals with personality pathology, is associated with particularly dysfunctional coping strategies (Connor-Smith & Fachsbart, 2007). In short, coping strategies are likely to be an especially important contributor to the development of personality pathology in youths, and the impact of coping strategies on personality development warrants more attention than it has received to date.

Narrative identity

Identity development and the role of personal narratives. The final domain included in McAdams and Pals' personality taxonomy (2006) is one that becomes increasingly salient as youths move into adolescence and early adulthood, namely, personal narratives. Personal narratives help young people to articulate and develop a clear identity. As Erikson (1950) pointed out more than half a century ago, an important developmental task for adolescents

in modern Western cultures is the development of a coherent sense of identity. This sense of identity emerges from adolescents' attempts to understand and define who they are as people: their overarching sense of their goals, values, meaning, and direction. Erikson argued that modern Western societies do not offer youths a "prepackaged" sense of identity that may have come in earlier centuries from a culture's religious or civic beliefs. Rather, individuals are faced with the task of developing a personal identity that brings together their own individual experiences, goals, and meanings. Beyond personal identity, other important aspects of identity involve individuals' sense of who they are in a broader context: their cultural, ethnic, and group identity (Schwartz, Zambonanga, & Weisskirch, 2008).

In McAdams and Pals' (2006) personality model, the main vehicle through which identity develops is through narratives. In other words, *narrative identity* emerges as youths and adults reflect on their lives as evolving stories. People look back on their previous experiences and weave these together into a narrative that connects current identity with specific memories and recurrent themes. This task only becomes possible in adolescence, when youths develop the ability to think in a more abstract, complex way about their lives and their futures (Habermas & de Silveira, 2008). The ability to discern and create coherence across time and across experiences requires fairly advanced reflective skills. McAdams (2008) has argued that, more so than traits or even characteristic adaptations, narratives are influenced by individuals' place in their cultural context. Narratives also change over time. Narrative identity is not something that is formed during late adolescence and early adulthood and then shapes the rest of individuals' lives; rather narrative identities are constructed and reconstructed as individuals grow through different stages of life and need to incorporate new experiences and developmental challenges (McAdams, 2008).

The development of narrative identity is a process embedded in social relationships from the beginning. Although most individuals are unlikely to develop a more extensive sense of narrative identity until at least adolescence, the building blocks for narrative identity are

created earlier in life. Already by preschool age, children work with their parents to co-construct retellings of past experiences (Nelson & Fivush, 2004); parents typically encourage their children to tell autobiographical stories, and together children and their parents discuss their diverging recollections about events. Parents differ in the ways that they speak with their children about these memories, and parents who encourage more elaboration have children who can tell more complex stories about their experiences (Fivush, Haden, & Reese, 2006). As children grow older, they continue to tell stories to their parents, but their audiences broaden to include peers. Adults share the vast majority of their most significant memories with other people, so individuals' social contexts continue to have an impact on the ways that memories become incorporated into broader life narratives (McLean, 2008).

How might personal narratives affect the development of PDs? At present, only borderline PD includes specific symptoms related to problems with identity functioning. However, a basic feature of most PDs is problems with self-views, and narrative identity is an essential element of how individuals perceive themselves. For example, there is evidence that higher levels of narcissism are associated with higher levels of power motivation in self-defining memories (Sutin & Robins, 2005). The prominence of certain kinds of memories in a person's narrative may motivate that person to behave in a consistent fashion in future situations. In addition, narrative identity is an increasingly important aspect of personality in adolescence, and therefore it is likely to play a part in emerging PDs. Narrative development may go awry in two ways that seem particularly relevant to PDs: problems with incorporating negative experiences into a positive, functional life story, and derailment of the construction of a coherent narrative.

First, the incorporation of negative experiences into a life narrative can pose challenges. Children may find it difficult to think about their negative life experiences in a deliberate fashion that does not exacerbate their initial negative responses to those experiences. In a recent study, children and young adolescents were asked to write about stressful experiences

for several days; the more that children wrote about their problems, negative evaluations of others, and explanations of their stressors, the more anxious and depressed they felt over time (Fivush, Marin, Crawford, Reynolds, & Brewin, 2007). Negative experiences can be ignored at times, but, as people reach later adolescence and adulthood, it becomes increasingly important to find a positive way of explaining and coping with negative experiences, particularly ones that hold great emotional significance (Pals, 2006). When people cannot find ways to positively integrate these negative experiences into their narratives, they and their stories suffer. A contamination sequence is a particularly negative component of some narratives (McAdams, 2009); in this type of sequence, a person describes a positive scene that becomes ruined or contaminated by something negative or painful that follows. The frequent inclusion of such sequences in life narratives is strongly associated with poor self-esteem and greater depression (McAdams, 2009). Adolescents suffering from some kinds of personality pathology may have particular difficulties with including negative experiences into their life stories in a way that preserves their sense of self-esteem and hope.

Second, problems with developing a coherent life story may contribute to the emergence of PDs in adolescence and early adulthood. Sometimes, youths feel overwhelmed by the task of establishing a sense of identity and find it very hard to commit to any particular life path (Luyckx et al., 2008). At other times, it is hard for youths to develop a coherent story that weaves together their sense of self with their many experiences. Some youths and adults have difficulty recounting specific memories, but instead, can only articulate very general groups of memories. This phenomenon, known as *overgeneral memory*, occurs in both depression and posttraumatic stress disorder (Williams et al., 2007). In other cases, youths may be stymied in their attempts to develop coherent narratives because of their difficulties with incorporating negative experiences into those narratives. Youths who have difficulty developing an integrated life story will miss out on the benefits of a coherent narrative as they make the transition to adulthood.

Putting the Person Together: Directions for Future Work on Personality Pathology in Childhood and Adolescence

This article has argued for the importance of incorporating work on normal personality development into future work on the development of PDs. As the developmental psychopathology framework suggests (Cicchetti, 1993), there is no reason to think that youths develop healthy personalities through one set of processes and disordered personalities through an altogether different set; rather, the same processes are likely to occur in both normal and troubled personality development. Each of the domains of personality described in the previous section (dispositional traits, characteristic adaptations, and personal narratives) has something important to contribute to our understanding of both normal and disordered personality. A complete model of the development of personality pathology will need to account for problematic development in all of these personality domains. The final subsection suggests some promising directions for future research tracing the pathways to healthy and problematic personality development.

Developmental pathways leading to disordered personality

Longitudinal studies that trace the developmental pathways leading to PDs are sorely needed. To date, there is only one longitudinal, epidemiological study of PDs: the Children in the Community Study (Cohen & Crawford, 2005; Cohen et al., 2005). This study has made impressive contributions to extant knowledge about the development of PDs and is the source of many of the findings reviewed in the first section of this paper. New longitudinal work on PD development can build on the findings of this study by considering what is known about normal personality development and by assessing a wide range of personality differences.

Fortunately, there is an increasingly large and rich literature about the development of personality traits, characteristic adaptations, and life narratives. For each these domains, it is possible to describe the psychological processes that may contribute to disordered devel-

opment. This is true even for the personality trait models of PDs. For each of the Big Five personality traits, our understanding of the underlying biological and psychological processes has expanded rapidly over the last decade (Canli, 2008; Caspi & Shiner, 2006; De Young & Gray, in press; Shiner & De Young, in press); the same is true for temperament traits (Rothbart & Bates, 2006). Traits can no longer be seen as mere static descriptions of individuals' behavior; rather, traits index a complex set of underlying biological and psychological processes. Of course, much remains to be learned about the development of individual differences in childhood and adolescence. For example, we know less than we should about the development of the trait of neuroticism, a particularly crucial trait in PDs. It is not yet possible to explain adequately the processes accounting for why some children are anxious, guilt prone, vulnerable, and emotionally labile, whereas other children are emotionally stable. Nonetheless, there is a great deal of productive work on personality processes that can be used as a starting point for more thorough research on the development of PDs.

In future work, it will be especially important to examine the environmental contributions to the development of personality pathology. For personality traits (Caspi & Shiner, 2008), characteristic adaptations (Pomerantz & Thompson, 2008), and personal narratives (McAdams, 2008), we already know a considerable amount about how the environment contributes to personality development. The insights from this research can be incorporated into new longitudinal research examining contextual contributors to personality pathology. Although theories about the family origins of PDs abound, relatively little data had addressed this issue until recently. There is now strong longitudinal evidence that childhood abuse (including sexual, physical, and verbal abuse) and neglect predict heightened risk for the later development of PDs (Johnson, Bromley, et al., 2006; Johnson et al., 2005). In addition, maladaptive parenting more generally poses risks for the development of PDs; such maladaptive parenting includes low parental affection or nurturing and aversive parental behavior, such as harsh punishment (Johnson, Cohen, Chen,

Kasen, & Brook, 2006). Behavior genetic designs will be particularly helpful in elucidating the roles of both genetic and environmental contributors to personality pathology.

Another important area for investigation is the pathways through which youths' personalities contribute to impairment in various life tasks. It is well established that personality differences predict adaptation in a wide range of developmental tasks (Caspi & Shiner, 2006; Ozer & Benet-Martinez, 2006; Roberts, Kuncel, Shiner, Caspi, & Goldberg, 2007). Children's personalities affect how they meet environmental demands and handle new developmental challenges. For example, positive changes in youths' academic achievement and rule-abiding behavior are predicted by their childhood conscientiousness and agreeableness, and positive changes in their close relationships are predicted by their childhood extraversion (Shiner, 2000). Problems with developmental tasks, in turn, exacerbate underlying personality difficulties. Children with a track record of poor academic achievement and antisocial conduct appear to become increasingly high strung, alienated, and hostile over time (Shiner, Masten, & Tellegen, 2002). Thus, a transaction may be established between personality and adaptation. Longitudinal research on the emergence of persistent impairment will be helpful in discovering how to break such transactional cycles.

Multifinality and equifinality in the development of personality pathology

In investigating contextual influences on PDs, it will be crucial to recognize that youths may follow varied pathways to the development of personality pathology. The developmental psychopathology framework emphasizes the likely possibility of equifinality and multifinality in development (Cicchetti & Rogosch, 1996). In *multifinality*, the same risk factor may affect different children in varied ways, because the outcome of that risk is contingent on each child's biology, context, and previous history (Sroufe, 1997). Some of the most dramatic evidence for this principle comes from work on maltreatment. Maltreated children vary widely in their life outcomes, with some maltreated

children showing internalizing or externalizing disorders and others manifesting resilience (Cicchetti, 2008). These varied outcomes are predicted by many factors, including children's genes (e.g., Caspi et al., 2002) and their personalities (Curtis & Cicchetti, 2007). The divergent outcomes seen in maltreated children remind us that life experiences alone are unlikely to provide a comprehensive account of the development of PDs.

The complementary principle of *equifinality* points to the fact that youths with similar outcomes may have followed diverse pathways to those outcomes. When applied to PDs, the principle of equifinality highlights the importance of exploring whether different processes may lead to similar patterns of personality pathology. For example, as described previously, early family adversity poses significant risks for the development of personality pathology, but early trauma and abuse are unlikely to be present in the histories of all youths with PDs. In fact, in the Children in the Community Study, early trauma and abuse "do not account for all, or even most cases of PD observed in our longitudinal cohort" (Cohen et al., 2005). In contrast, some youths may struggle with such extreme traits from early in life that those traits overwhelm the effects of a generally good enough environment (e.g., Zanarini & Frankenburg, 2007). For example, a child who is intensely sensitive to rejection may misinterpret kind or neutral behavior starting early in life. In short, it is important to recognize that temperament may play a more central role in some pathways, whereas negative life experiences may be more central in other ones (Nigg, Silk, Stavro, & Miller, 2005).

Likewise, youths with similar outcomes may vary in the time course over which their personality difficulties develop. For some youths, the pathway may be more continuous and linear. For example, a child who is temperamentally prone toward hostility and impulsivity may gradually become increasingly angry and poorly regulated over time, as that child encounters more and more experiences that contribute to the development of these negative traits. In contrast, other youths may show a course that is more abrupt and nonlinear. In this kind of pathway, vulnerable youths may encounter life experiences that lead to abrupt changes in their

personality functioning. For example, an adolescent who is somewhat high on neuroticism may experience a painful breakup of a romantic relationship, a significant failure at school, a surprising parental divorce, or an intense experience of rejection from friends. This negative event could lead the youth to adopt self-destructive coping strategies (e.g., through social withdrawal or self-harm) and a negative cycle of behavior could ensue. In future work, it will be important to recognize the possibilities of these diverse processes leading to PDs.

Implications for diagnosis and treatment of PDs in youths

Finally, current research on PD development can inform new practices in the assessment and treatment of youths with personality pathology. Youths' personalities are often seen as being "under construction" during childhood and adolescence and therefore too unstable to have lasting significance. The *DSM-IV* cautions against diagnosing PDs in youths under the age of 18, except in unusual circumstances. Clinicians may avoid assigning an Axis II diagnosis to their adolescent patients, even when those patients fully meet the criteria for one or more PDs (Westen, Shedler, Durrett, Glass, & Martens, 2003). As the data reviewed here make clear, personality difficulties often are not transient phenomena in adolescence. In light of more recent knowledge about personality change (Roberts et al., 2008) and about the treatment of PDs in adults (Crits-Christoph & Barber, 2004; Fonagy, Roth, & Higgitt, 2005; Leichsenring & Leibling, 2003), a diagnosis of a PD in adolescence need not be seen as consigning youths to permanent lives of suffering and difficulty. For the *DSM-V*, the newer research on the stability of PD symptoms should inform decisions about the standards for diag-

nosing PDs in young people. There is no marked increase in the stability of PD symptoms and impairment after the age of 18. By discouraging the diagnosis of PDs in people under the age of 18, youths with personality pathology may receive incorrect treatment or may not receive the treatment they need (Shiner, 2007).

The development of empirically validated treatments for youths with PDs is an urgent need, given the paucity of research on this topic. This need is especially vital, because adolescents with PDs may often present as "complex cases," meaning cases that involve some combination of significant comorbidity, risk for self-harm or harm to others, substance abuse, low motivation for or compliance with treatment, or a stressful social environment (Ruscio & Holohan, 2006). Empirically validated treatments for adults with PDs can be modified for use with adolescents. There are a number of psychodynamic, cognitive, behavioral, and integrative treatments that could be adapted (Shiner, 2007).

Careful attention to the personality processes described in this paper may greatly enhance treatment for youths by allowing clinicians to tailor the treatment to the developmental needs of adolescents. For example, adolescents may not recognize their own personality traits or the impact of their traits on others; they may need help finding means of effectively coping with and working with their traits. Adolescents may require particular help with developing coping strategies that work for their level of cognitive development. They may also need assistance as they struggle to develop a meaningful life narrative for the first time. Particular personality patterns, understood in the context of the youth's life, may be the best targets for treatment. By tracing the pathways leading to PDs, it will be possible to create treatment programs that better meet the developmental needs of these youths.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Beauchaine, T. P. (2003). Taxometrics and developmental psychopathology. *Development and Psychopathology*, *15*, 501–527.
- Bernstein, D. P., Cohen, P., Velez, C. N., Schwab-Stone, M., Siever, L. J., & Shinsato, L. (1993). Prevalence and stability of the *DSM-III-R* personality disorders in a community-based survey of adolescents. *American Journal of Psychiatry*, *150*, 1237–1243.
- Blair, R. J., & Viding, E. (2008). Psychopathy. In M. Rutter, D. Bishop, D. Pine, S. Scott, J. Stevenson, E. Taylor, et al. (Eds.), *Rutter's child and adolescent psychiatry* (5th ed., pp. 852–863). Malden, MA: Blackwell.

- Bleiberg, E. (2001). *Treating personality disorders in children and adolescents: A relational approach*. New York: Guilford Press.
- Canli, T. (2008). Toward a "molecular psychology" of personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 311–327). New York: Guilford Press.
- Caspi, A., McClay, J., Moffitt, T., Mill, J., Martin, J., Craig, I. W., et al. (2002). Role of genotype in the cycle of violence in maltreated children. *Science*, *297*, 851–854.
- Caspi, A., & Shiner, R. L. (2006). Personality development. In W. Damon & R. Lerner (Series Eds.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (6th ed., pp. 300–365). New York: Wiley.
- Caspi, A., & Shiner, R. L. (2008). Temperament and personality. In M. Rutter, D. Bishop, D. Pine, S. Scott, J. Stevenson, E. Taylor, et al. (Eds.), *Rutter's child and adolescent psychiatry* (5th ed., pp. 182–198). Malden, MA: Blackwell.
- Cicchetti, D. (1993). Developmental psychopathology: Reactions, reflections, projections. *Developmental Review*, *13*, 471–502.
- Cicchetti, D. (2008). A multiple levels-of-analysis perspective on research in development and psychopathology. In T. P. Beauchaine & S. P. Hinshaw (Eds.), *Child and adolescent psychopathology* (pp. 27–57). Hoboken, NJ: Wiley.
- Cicchetti, D., & Rogosch, F. A. (1996). Equifinality and multifinality in development. *Development and Psychopathology*, *8*, 597–600.
- Clark, L. A. (2005). Temperament as a unifying basis for personality and psychopathology. *Journal of Abnormal Psychology*, *114*, 505–521.
- Clark, L. A. (2007). Assessment and diagnosis of personality disorder: Perennial issues and an emerging reconceptualization. *Annual Review of Psychology*, *58*, 227–257.
- Cohen, P., & Crawford, T. (2005). Developmental issues. In J. M. Oldham, A. E. Skodol, & D. S. Bender (Eds.), *The American Psychiatric Publishing textbook of personality disorders* (pp. 171–185). Washington, DC: American Psychiatric Publishing.
- Cohen, P., Crawford, T. N., Johnson, J. G., & Kasen, S. (2005). The children in the community study of developmental course of personality disorder. *Journal of Personality Disorders*, *19*, 466–486.
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Progress, problems, and potential in theory and research. *Psychological Bulletin*, *127*, 87–127.
- Connor-Smith, J. K., Compas, B. E., Wadsworth, M. E., Thomsen, A. H., & Saltzman, H. (2000). Response to stress: Measurement of coping and reactivity in children and adolescents. *Journal of Consulting and Clinical Psychology*, *68*, 976–992.
- Connor-Smith, J. K., & Flachsbart, C. (2007). Relations between personality and coping: A meta-analysis. *Journal of Personality and Social Psychology*, *93*, 1080–1107.
- Cramer, P. (2008). Seven pillars of defense mechanism theory. *Social and Personality Psychology Compass*, *2*, 1963–1981.
- Crawford, T. N., Cohen, P., First, M. B., Skodol, A. E., Johnson, J. G., & Kasen, S. (2008). Comorbid Axis I and Axis II disorders in early adolescence: Outcomes 20 years later. *Archives in General Psychiatry*, *65*, 641–648.
- Crawford, T. N., Shaver, P. R., Cohen, P., Pilkonis, P. A., Gillath, O., & Kasen, S. (2006). Self-reported attachment, interpersonal aggression, and personality disorder in a prospective community sample of adolescents and adults. *Journal of Personality Disorders*, *20*, 331–351.
- Crits-Christoph, P., & Barber, J. P. (2004). Empirical research on the treatment of personality disorders. In J. J. Magnavita (Ed.), *Handbook of personality disorders: Theory and practice* (pp. 513–527). New York: Wiley.
- Curtis, W. J., & Cicchetti, D. (2007). Emotion and resilience: A multilevel investigation of hemispheric electroencephalogram asymmetry and emotion regulation in maltreated and nonmaltreated children. *Development and Psychopathology*, *19*, 811–840.
- Daley, S. E., Hammen, C., Burge, D., Davila, J., Paley, B., Lindberg, N., et al. (1999). Depression and Axis II symptomatology in an adolescent community sample: Concurrent and longitudinal associations. *Journal of Personality Disorders*, *13*, 47–59.
- De Clercq, B., De Fruyt, F., Van Leeuwen, K., & Mervielde, I. (2006). The structure of maladaptive personality traits in childhood: A step toward an integrative developmental perspective for *DSM-V*. *Journal of Abnormal Psychology*, *115*, 639–657.
- De Clercq, B., De Fruyt, F., & Widiger, T. A. (in press). Integrating a developmental perspective in dimensional models of personality disorders. *Clinical Psychology Review*.
- De Pauw, S. S. W., Mervielde, I., & Van Leeuwen, K. G. (2009). How are traits related to problem behavior in preschool children? Similarities and contrasts between temperament and personality. *Journal of Abnormal Child Psychology*, *37*, 309–325.
- De Young, C. G., & Gray, J. R. (in press). Personality neuroscience: Explaining individual differences in affect, behavior, and cognition. In P. J. Corr & G. Matthews (Eds.), *Cambridge handbook of personality*. New York: Cambridge University Press.
- Dweck, C. S., & London, B. (2004). The role of mental representation in social development. *Merrill-Palmer Quarterly*, *50*, 428–444.
- Dolan-Sewell, R. T., Krueger, R. F., & Shea, M. T. (2001). Co-occurrence with syndrome disorders. In W. J. Livesley (Ed.), *Handbook of personality disorders: Theory, research, and treatment* (pp. 84–104). New York: Guilford Press.
- Ehrensaft, M. K., Cohen, P., & Johnson, J. G. (2006). Development of personality disorder symptoms and the risk for partner violence. *Journal of Abnormal Psychology*, *115*, 474–483.
- Erikson, E. H. (1950). *Childhood and society*. New York: Norton.
- Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. *Child Development*, *77*, 1568–1588.
- Fivush, R., Marin, K., Crawford, M., Reynolds, M., & Brewin, C. R. (2007). Children's narratives and well-being. *Cognition and Emotion*, *21*, 1414–1434.
- Fonagy, P., Roth, A., & Higgitt, A. (2005). Psychodynamic psychotherapies: Evidence-based practice and clinical wisdom. *Bulletin of the Menninger Clinic*, *69*, 1–58.
- Fraley, R. C., & Shaver, P. R. (2008). Attachment theory and its place in contemporary personality theory and research. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 518–541). New York: Guilford Press.

- Geiger, T., & Crick, N. R. (2001). A developmental psychopathology perspective on vulnerability to personality disorders. In R. Ingram & J. M. Price (Eds.), *Vulnerability to psychopathology: Risk across the life span*. New York: Guilford Press.
- Grant, K. E., Compas, B. E., Thurm, A. E., McMahon, S. D., & Gipson, P. Y. (2004). Stressors and child and adolescent psychopathology. *Journal of Clinical Child and Adolescent Psychology*, *33*, 412–425.
- Greenberg, L. S., Elliott, R., & Lietaer, G. (2003). Humanistic-existential psychotherapy. In G. Stricker & T. T. Widiger (Eds.), *Handbook of psychology: Vol. 8. Clinical psychology* (pp. 301–325). New York: Wiley.
- Gregory, A. M., Rijdsdijk, F. V., Lau, J. Y. F., Napolitano, M., McGuffin, P., & Eley, T. C. (2007). Genetic and environmental influences on interpersonal cognitions and associations with depressive symptoms in 8-year-old twins. *Journal of Abnormal Psychology*, *116*, 762–775.
- Grislo, C. M., & McGlashan, T. H. (2005). Course and outcome of personality disorders. In J. M. Oldham, A. E. Skodol, & D. S. Bender (Eds.), *The American Psychiatric Publishing textbook of personality disorders* (pp. 103–115). Washington DC: American Psychiatric Publishing.
- Habermas, T., & de Silveira, C. (2008). The development of global coherence in life narratives across adolescence: Temporal, causal, and thematic aspects. *Developmental Psychology*, *44*, 707–721.
- Hill, J. (2008). Disorders of personality. In M. Rutter, D. Bishop, D. Pine, S. Scott, J. Stevenson, E. Taylor, et al. (Eds.), *Rutter's child and adolescent psychiatry* (5th ed., pp. 841–851). Malden, MA: Blackwell.
- Hinshaw, S. P. (2008). Developmental psychopathology as a scientific discipline: Relevance to behavioral and emotional disorders of childhood and adolescence. In T. P. Beauchaine & S. P. Hinshaw (Eds.), *Child and adolescent psychopathology* (pp. 3–26). Hoboken, NJ: Wiley.
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 114–158). New York: Guilford Press.
- Johnson, J. G., Bromley, E., Bornstein, R. F., & Sneed, J. R. (2006). Adolescent personality disorders. In D. A. Wolfe & E. J. Mash (Eds.), *Behavioral and emotional disorders in children and adolescents: Nature, assessment, and treatment* (pp. 463–484). New York: Guilford Press.
- Johnson, J. G., Bromley, E., & McGeoch, P. G. (2005). Role of childhood experiences in the development of maladaptive and adaptive personality traits. In J. M. Oldham, A. E. Skodol, & D. S. Bender (Eds.), *The American Psychiatric Publishing textbook of personality disorders* (pp. 209–221). Washington, DC: American Psychiatric Publishing.
- Johnson, J. G., Cohen, P., Chen, H., Kasen, S., & Brook, J. S. (2006). Parenting behaviors associated with risk for offspring personality disorder during adulthood. *Archives of General Psychiatry*, *63*, 579–587.
- Johnson, J. G., Cohen, P., Skodol, A. E., Oldham, J. M., Kasen, S., & Brook, J. S. (1999). Personality disorders in adolescence and risk of major mental disorders and suicidality during adulthood. *Archives of General Psychiatry*, *56*, 805–811.
- Johnson, J. G., Cohen, P., Smailes, E., Kasen, S., Oldham, J. M., & Skodol, A. E. (2000). Adolescent personality disorders associated with violence and criminal behavior during adolescence and early adulthood. *American Journal of Psychiatry*, *157*, 1406–1412.
- Johnson, J. G., First, M. B., Cohen, P., Skodol, A. E., Kasen, S., & Brook, J. S. (2005). Adverse outcomes associated with personality disorder not otherwise specified in a community sample. *American Journal of Psychiatry*, *162*, 1926–1932.
- Kendler, K. S., Aggen, S. H., Czajkowski, N., Røysamb, E., Tambs, K., Torgersen, S., et al. (2008). The structure of genetic and environmental risk factors for DSM-IV personality disorders: A multivariate twin study. *Archives of General Psychiatry*, *65*, 1438–1446.
- Kernberg, P. F., Weiner, A. S., & Bardenstein, K. K. (2000). *Personality disorders in children and adolescents*. New York: Basic Books.
- Krueger, R. F., & Johnson, W. (2008). Behavior genetics and personality: A new look at the integration of nature and nurture. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 287–310). New York: Guilford Press.
- Lavan, H., & Johnson, J. G. (2002). The association between Axis I and II psychiatric symptoms and high-risk sexual behavior during adolescence. *Journal of Personality Disorders*, *16*, 73–94.
- Leff, S. S., Crick, N. R., Angelucci, J., Haye, K., Jaward, A. F., Grossman, M., et al. (2006). Social cognition in context: Validating a cartoon-based attributional measure for urban girls. *Child Development*, *77*, 1351–1358.
- Leichsenring, R., & Leibling, E. (2003). The effectiveness of psychodynamic therapy and cognitive-behavioral therapy in the treatment of personality disorders: A meta-analysis. *American Journal of Psychiatry*, *160*, 1223–1232.
- Lewinsohn, P. M., Rohde, P., Seeley, J. R., & Klein, D. N. (1997). Axis II psychopathology as a function of Axis I disorders in childhood and adolescence. *Journal of the American Academy of Child & Adolescent Psychiatry*, *36*, 1752–1759.
- Livesley, W. J. (2007). A framework for integrating dimensional and categorical classifications of personality disorder. *Journal of Personality Disorders*, *21*, 199–224.
- Lodi-Smith, J. L., & Roberts, B. W. (2007). Social investment and personality: A meta-analytic analysis of the relationship of personality traits to investment in work, family, religion, and volunteerism. *Personality and Social Psychology Review*, *11*, 68–86.
- Lyuckx, K., Schwartz, S. J., Berzonsky, M. D., Soenens, B., Vansteenkiste, M., Smits, I., et al. (2008). Capturing ruminative exploration: Extending the four-dimensional model of identity formation in late adolescence. *Journal of Research in Personality*, *42*, 58–82.
- Lynam, D. R., & Gudonis, L. (2005). The development of psychopathy. *Annual Review of Clinical Psychology*, *1*, 381–407.
- MacDonald, K. (1995). Evolution, the five-factor model, and levels of personality. *Journal of Personality*, *63*, 525–567.
- Markon, K. E., Krueger, R. F., & Watson, D. (2005). Delineating the structure of normal and abnormal personality: An integrative hierarchical approach. *Journal of Personality and Social Psychology*, *88*, 139–157.
- Mattia, J. I., & Zimmerman, M. (2001). Epidemiology. In W. J. Livesley (Ed.), *Handbook of personality disorders: Theory, research, and treatment* (pp. 107–123). New York: Guilford Press.
- McAdams, D. P. (1995). What do we know when we know a person? *Journal of Personality*, *73*, 365–396.
- McAdams, D. P. (2008). Personal narratives and the life story. In O. P. John, R. W. Robins, & L. A. Pervin

- (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 242–262). New York: Guilford Press.
- McAdams, D. P. (2009). *The person: An introduction to the science of personality psychology* (5th ed.). New York: Wiley.
- McAdams, D. P., & Pals, J. L. (2006). A new Big Five: Fundamental principles for an integrative science of personality. *American Psychologist*, *61*, 204–217.
- McGlashan, T. H., Grilo, C. M., Sanislow, C. A., Ralevski, E., Morey, L. C., Gunderson, J. G., et al. (2005). Two-year prevalence and stability of individual *DSM-IV* criteria for schizotypal, borderline, avoidant, and obsessive-compulsive personality disorders: Toward a hybrid model of axis II disorders. *American Journal of Psychiatry*, *162*, 883–889.
- McLean, K. C. (2008). The emergence of narrative identity. *Social and Personality Psychology Compass*, *2*, 1685–1702.
- Mervielde, I., De Clercq, B., De Fruyt, F., & van Leeuwen, K. (2005). Temperament, personality, and developmental psychopathology as childhood antecedents of personality disorders. *Journal of Personality Disorders*, *19*, 171–201.
- Mezulis, A. H., Hyde, J. S., & Abramson, L. Y. (2006). The developmental origins of cognitive vulnerability to depression: Temperament, parenting, and negative life events in childhood as contributors to negative cognitive style. *Developmental Psychology*, *42*, 1012–1025.
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York: Guilford Press.
- Molden, D. C., & Dweck, C. S. (2006). Finding “meaning” in psychology: A lay theories approach to self-regulation, social perception, and social development. *American Psychologist*, *61*, 192–203.
- Nettle, D. (2006). The evolution of personality variation in humans and other animals. *American Psychologist*, *61*, 622–631.
- Nelson, K., & Fivush, R. (2004). The emergence of autobiographical memory: A social cultural developmental theory. *Psychological Review*, *111*, 486–511.
- Nigg, J. T., Silk, K. R., Stavro, G., & Miller, T. (2005). Disinhibition and borderline personality disorder. *Development and Psychopathology*, *17*, 1129–1149.
- Olson, K. R., & Dweck, C. S. (2008). A blueprint for social cognitive development. *Perspectives on Psychological Science*, *3*, 193–202.
- Ozer, D. J., & Benet-Martinez, V. (2006). Personality and the prediction of consequential outcomes. *Annual Review of Psychology*, *57*, 401–421.
- Pals, J. L. (2006). Authoring a second chance in life: Emotion and transformational processing within narrative identity. *Research in Human Development*, *3*, 101–120.
- Pomerantz, E. M., & Thompson, R. A. (2008). Parents’ role in children’s personality development: The psychological resource principle. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 351–374). New York: Guilford Press.
- Posner, M. E., Rothbart, M. K., Sheese, B. E., & Tang, Y. (2007). The anterior cingulate gyrus and the mechanism of self-regulation. *Cognitive, Affective, and Behavioral Neuroscience*, *7*, 391–395.
- Roberts, B. W., & DelVecchio, W. F. (2000). The rank-order consistency of personality traits from childhood to old age: A quantitative review of longitudinal studies. *Psychological Bulletin*, *126*, 3–25.
- Roberts, B. W., Kuncel, N. R., Shiner, R. L., Caspi, A., & Goldberg, L. R. (2007). The power of personality: The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. *Perspectives in Psychological Science*, *2*, 313–345.
- Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*, *132*, 1–25.
- Roberts, B. W., Wood, D., & Caspi, A. (2008). The development of personality traits in adulthood. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 375–398). New York: Guilford Press.
- Roisman, G. E., Masten, A. S., Coatsworth, J. D., & Tellegen, A. (2004). Salient and emerging developmental tasks in the transition to adulthood. *Child Development*, *75*, 123–133.
- Rothbart, M. K., & Bates, J. E. (2006). Temperament. In W. Damon & R. Lerner (Series Eds.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (6th ed., pp. 99–166). New York: Wiley.
- Rudolph, K. D., Hammen, C., & Burge, D. (1995). Cognitive representations of self-family, and peers in school-age children—Links with social competence and sociometric status. *Child Development*, *66*, 1385–1402.
- Ruscio, A. M., & Holohan, D. R. (2006). Applying empirically supported treatments to complex cases: Ethical, empirical, and practical considerations. *Clinical Psychology: Science and Practice*, *13*, 146–162.
- Saudino, K. J. (2005). Behavioral genetics and child temperament. *Journal of Developmental and Behavioral Pediatrics*, *26*, 214–223.
- Schwartz, S. J., Zamboanga, B. L., & Weisskirch, R. S. (2008). Broadening the study of the self-Integrating the study of personal identity and cultural identity. *Social and Personality Psychology Compass*, *2*, 635–651.
- Shiner, R. L. (2000). Linking childhood personality with adaptation: Evidence for continuity and change across time into late adolescence. *Journal of Personality and Social Psychology*, *78*, 310–325.
- Shiner, R. L. (2007). Personality disorders. In E. J. Mash & R. A. Barkley (Eds.), *Assessment of childhood disorders* (4th ed., pp. 781–816). New York: Guilford Press.
- Shiner, R. L. (in press). Mapping the landscape of personality in childhood and adolescence. *Social Psychology and Personality Psychology Compass*.
- Shiner, R. L., & DeYoung, C. G. (in press). Personality structure in childhood and adolescent. *Oxford handbook of developmental psychology*.
- Shiner, R. L., Masten, A. S., & Tellegen, A. (2002). A developmental perspective on personality in emerging adulthood: Childhood antecedents and concurrent adaptation. *Journal of Personality and Social Psychology*, *83*, 1165–1177.
- Skinner, E. A., & Zimmer-Gembeck, M. J. The development of coping. *Annual Review of Psychology*, *58*, 199–144.
- Skodol, A. E. (2005). Manifestations, clinical diagnosis, and comorbidity. In J. M. Oldham, A. E. Skodol, & D. S. Bender (Eds.), *The American Psychiatric Publishing textbook of personality disorders* (pp. 57–87). Washington, DC: American Psychiatric Publishing.
- Skodol, A. E., Bender, D. S., Pagano, M. E., Shea, M. T., Yen, S., Sanislow, C. A., et al. (2007). Positive childhood experiences: Resilience and recovery from personality

- disorder in early adulthood. *Journal of Clinical Psychiatry*, 68, 1102–1108.
- Skodol, A. E., Gunderson, J. G., Shea, M. T., McGlashan, T. H., Morey, L. C., Sanislow, C. A., et al. (2005). The Collaborative Longitudinal Personality Disorders Study (CLPS): Overview and implications. *Journal of Personality Disorders*, 19, 487–504.
- Skodol, A. E., Johnson, J. G., Cohen, P., Sneed, J. R., & Crawford, T. N. (2007). Personality disorder and impaired functioning from adolescence to adulthood. *British Journal of Psychiatry*, 190, 415–420.
- Sroufe, L. A. (1997). Psychopathology as an outcome of development. *Development and Psychopathology*, 9, 251–268.
- Sroufe, L. A., Carlson, E. A., Levy, A. K., & Egeland, B. (1999). Implications of attachment theory for developmental psychopathology. *Development and Psychopathology*, 11, 1–13.
- Sutin, A. R., & Robins, R. W. (2005). Continuity and correlates of emotions and motives in self-defining memories. *Journal of Personality*, 73, 793–824.
- Tackett, J. L., Silberschmidt, A. L., Krueger, R. F., & Spohnheim, S. R. (2008). A dimensional model of personality disorder: Incorporating *DSM* Cluster A characteristics. *Journal of Abnormal Psychology*, 117, 454–459.
- Torgersen, S. (2005). Epidemiology. In J. M. Oldham, A. E. Skodol, & D. S. Bender (Eds.), *The American Psychiatric Publishing textbook of personality disorders* (pp. 129–141). Washington, DC: American Psychiatric Publishing.
- Trull, T. J., & Durrett, C. A. (2005). Categorical and dimensional models of personality disorder. *Annual Review of Clinical Psychology*, 1, 355–380.
- Verheul, R., & Widiger, T. A. (2004). A meta-analysis of the prevalence and usage of the personality disorder not otherwise specified (PD-NOS) diagnosis. *Journal of Personality Disorders*, 18, 309–319.
- Westen, D., & Chang, C. (2000). Personality pathology in adolescence: A review. In A. H. Esman, L. T. Flaherty, & H. A. Horowitz (Eds.), *Adolescent psychiatry: Developmental and clinical studies* (Vol. 25, pp. 61–100). Mahwah, NJ: Analytic Press.
- Westen, D., Nakash, O., Thomas, C., & Bradley, R. (2006). Clinical assessment of attachment patterns and personality disorder in adolescents and adults. *Journal of Consulting and Clinical Psychology*, 74, 1065–1085.
- Westen, D., Shedler, J., Durrett, C., Glass, S., & Martens, A. (2003). Personality diagnoses in adolescence: *DSM-IV* Axis II diagnoses and an empirically derived alternative. *American Journal of Psychiatry*, 160, 952–966.
- Widiger, T. A., & Simonsen, E. (2005). Alternative dimensional models of personality disorder: Finding a common ground. *Journal of Personality Disorders*, 19, 110–130.
- Widiger, T. A., & Trull, T. J. (2007). Plate tectonics in the classification of personality disorder: Shifting to a dimensional model. *American Psychologist*, 62, 71–83.
- Wiggins, J. S., & Trobst, K. K. (1999). The fields of interpersonal behavior. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 653–670). New York: Guilford Press.
- Williams, J. M. G., Barnhofer, T., Crane, C., Herman, D., Raes, F., Watkins, E., et al. (2007). Autobiographical memory specificity and emotional disorder. *Psychological Bulletin*, 133, 122–148.
- Zanarini, M. C., & Frankenburg, F. R. (2007). The essential nature of borderline psychopathology. *Journal of Personality Disorders*, 21, 518–535.
- Zanarini, M. C., Frankenburg, F. R., Hennen, J., Reich, B., & Silk, K. R. (2005). The McLean Study of Adult Development (MSAD): Overview and implications of the first six years of prospective follow-up. *Journal of Personality Disorders*, 19, 505–523.