

# Adolescent Personality Pathology and the Alternative Model for Personality Disorders: Self Development as Nexus

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## Keywords

Adolescence · Personality disorder · DSM-5 alternative model

## Abstract

This paper reviews maladaptive trait development (DSM-5 Section III Criterion B), the development of DSM-5 Section II borderline personality disorder, and research on the development of identity, self-direction, empathy/mentalizing, and intimacy (DSM-5 Section III Criterion A). Combined, these previously disparate literatures begin to point to an integrated developmental theory of personality pathology, which suggests that Criterion A concepts (identity, self-direction, empathy, and intimacy) coalesce around the development of self, marking a discontinuous (qualitative) developmental shift. This developmental shift is a function of the demands placed on individuals to take on independent adult role function, combined with biologically-based maturational cognitive and emotional advances during adolescence. Section II personality disorder ensues when an integrated and coherent sense of self fails to develop, resulting in nonfulfilment of adult role function. In this sense, Criterion A self function can account for the onset of Section II personality disorder in adolescence, while Criterion B provides a useful descriptive account of continuous aspects of personality function over time.

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## Introduction

The publication of the Alternative Model for Personality Disorders (AMPD) in DSM-5 Section III allows for a developmentally sensitive elaboration of maladaptive personality in two important ways. First, the AMPD legitimizes a dimensional trait perspective (Criterion B), which facilitates the integration of decades of developmental temperament and trait research [1–4] into more recent research on personality disorder in youth [5, 6]. Second, the AMPD legitimizes maladaptive self and interpersonal function (Criterion A), as a unidimensional severity continuum, as the common and core feature shared by all personality pathology, regardless of Criterion B “flavor.” In so doing, the AMPD facilitates the integration of developmental research on constructs such as identity, self-directedness, empathy, and intimacy with what is currently known about Section II personality disorder in adolescents. Combined, these previously disparate literatures begin to point to an integrated developmental theory of personality pathology, which in abbreviated form suggests the following: Already at birth, a child’s position on any dispositional trait dimension (Criterion B) can be readily identified and recognized. While research suggest a normative increase in maladaptive personality traits in adolescence, followed by a normative decline thereafter, children’s position on Criterion B dimensions relative to their

same-age peers remains relatively stable throughout development. And while children as young as infants may evidence extreme scores on temperamental measures indicative of maladaptive trait function, they are not diagnosed with personality disorder before adolescence, because until adolescence, there is a limited requirement placed on children to acquire the new level of knowledge, skills, and cultural competence to successfully transition to an independent adult role [7]. Therefore, adolescence ushers in a qualitatively distinct maturational period where, in order to take on adult rights, responsibilities, and social and occupational roles, certain functions, subserved by qualitative shifts in cognitive and neural maturation, must come on line [7]. Many of these functions fall within the purview of identity, self-direction, empathy, and intimacy – in short, Criterion A – but coalesce around the development of self. In sum then, viewed through a developmental lens, Criterion B represents developmental continuity in personality pathology, while Criterion A represents developmental discontinuity. As such, Criterion A, but not Criterion B, can account for the onset of personality disorder in adolescence. To build this argument, I will begin by reviewing the developmental literature on maladaptive trait (Criterion B) development. I will then review the current knowledge base on Section II personality disorder in adolescence (in particular borderline personality disorder [BPD]), followed by a review of developmental research on concepts associated with Criterion A function: identity, self-direction, empathy, and intimacy, explaining how Criterion A concepts are interconnected to facilitate the development of self, thereby marking a qualitative shift in personality development – referred to as the “binding” of personality.

### **Maladaptive Trait (Criterion B) Development**

Research conducted over the last 30 years on maladaptive trait development is best represented by the developmental personality-psychopathology spectrum approach [1–3, 8–12]. According to this approach, personality begins with temperamental traits already observable during infancy and toddlerhood, which make up the entirety of personality during the early years [8, 13]. Temperament describes the initial state from which personality develops and links individual differences in behavior to genetic endowment and underlying neural networks [14]. The original dimensions described by Thomas and Chess [15] on which children show variability in their reactions to the environment included activity level, approach/withdrawal, intensity

threshold, adaptability, rhythmicity, mood, attention span, persistence, and distractibility. These dimensions were later refined to include the broad dimensions of effortful control, negative affectivity, and extraversion/surgency [4]. These dimensions appear to be valid cross-culturally [16] and demonstrate strong similarities to the structure of temperament in other animals [4] as well as to the Big Five personality factors of Extraversion (extraversion/surgency), Neuroticism (negative affectivity), and Conscientiousness (effortful control) [17]. Research investigating the links between these temperamental dimensions and symptoms of emotional and behavior disorders suggest that temperamental traits are explained by an underlying two-factor model of internalizing and externalizing behavior [18]. Similarly, research using personality (not temperament) measures has consistently replicated adult findings for a five-factor structure of typical [19, 20] and maladaptive trait function in childhood and adolescence [21], which are also subsumed by the two-dimensional spectra of internalizing and externalizing behavior [22].

The implication of this developmental model of personality-psychopathology spectrum is that internalizing and externalizing pathology constitute the severe (extreme) end on a dimensional continuum of temperamental/personality traits. For instance, externalizing disorders are seen as extreme variants of the trait of Disinhibition, and depression and anxiety constitute the extreme variant of the trait of Negative Affectivity [8]. Similarly, personality disorder is conceptualized from this perspective as extreme variants of basic traits, such that early individual differences in Emotional Stability, Extraversion, Imagination/Openness, Agreeableness, and Conscientiousness as represented by the five-factor model are seen to be meaningfully related to each of the DSM-based personality disorders in a largely similar way as has been demonstrated for adults and youth [10].

Two important take-home messages are derived from the developmental personality-psychopathology spectrum approach to personality. First, trait-defined personality is weaved into, or subserves, all manifestations of psychopathology [23]; and second, it suggests developmental continuity in personality development in that underlying structural features are understood within the same dimensional hierarchical framework across different age periods. Put differently, according to this model, whether one is interested in temperament in a 2-year-old, the Big Five in an 8-year-old, or maladaptive trait function in a 15- or 34-year-old, the same five-factor structure subserved by the two-dimensional internalizing/externalizing spectra explains the organization of behavior.

## Section II Personality Disorder in Adolescence

Over the last 10–15 years, there has been a proliferation of research in adolescents using narrow-band measures of DSM-IV or DSM-5 Section II-defined personality disorder, in particular BPD. Although not in line with recent trends towards more dimensionally defined constructs of psychopathology [24], this research, which relies on more traditional DSM-based concepts such as BPD, was important for clinical reasons. Specifically, at the time of its inception, clinicians were (and sometimes still are) reluctant to identify and treat young people with personality challenges, resulting in these youngsters not receiving the help they needed [25]. Therefore, it was important, from a clinical standpoint, to demonstrate validity and reliability of DSM-sanctioned constructs such as BPD in adolescence so that the many evidence-based treatments that were developed for adult BPD could be evaluated for efficacy in young people, in addition to the development of preventative efforts. Reluctance in assessing and treating adolescent BPD was based on a variety of myths about personality disorder in adolescence, which have now been shown to be unsupported by the evidence as reviewed elsewhere [23, 26–28]. In short, we now know that Section II personality disorder, categorically defined, can be reliably and validly assessed in 12- to 17-year-olds. A wide variety of interview-based and self-report measures have been developed and validated. These measures show strong and similar psychometric properties in the assessment of Section II BPD in adolescents as in adults [6]. Using these measures, several studies have evaluated the prevalence of Section II BPD in adolescents and have shown that rates mirror those of adults – e.g., 3% in the United Kingdom [29] and the United States [30] and 2% in China [31]. Using narrow-band, continuously scored measures of borderline symptoms, research has demonstrated the onset of BPD to occur in adolescence [32]. Research using validated measures of Section II BPD in adolescence has also demonstrated very similar correlates, risk factors, and antecedents to studies conducted in adults [33]. Important in this regard have been consistent findings that Section II BPD is preceded by a comorbid pattern of internalizing and externalizing behavior in preadolescence, but not the other way round [34]. Moreover, when Section II BPD (as a continuous or categorical variable) is entered into hierarchical regression analyses to assess its incremental value in predicting relevant outcomes, it appears to add not only statistically, but also clinically significant predictive value to the model [35–37]. Therefore, Section II BPD appears to add unique pre-

dictive value to outcomes above and beyond that of internalizing/externalizing spectra disorders. Furthermore, in answer to concerns over Section II BPD being distinguishable from typical adolescent “storm and stress,” studies have consistently shown Section II-defined BPD groups to show increased levels in a variety of maladaptive correlates (e.g., mentalizing, experiential avoidance, emotion dysregulation) compared to both psychiatric (adolescents with internalizing and externalizing disorders, but without Section II-defined BPD) and healthy controls [35, 38–40]. Finally, Section II-defined BPD appears to be as treatable in youngsters as it is in adults [6], with similar effect sizes for treating depression [41].

Taken together, this research, which has used more traditional criteria for establishing the validity of a diagnosis [42], has firmly established the diagnosis of Section II BPD in adolescence and its importance as a novel public health problem [25]. However, that Section II BPD indexes a form of psychopathology that can be reliably distinguished from the internalizing-externalizing spectra in both phenomenology and course should be interpreted against the background of the failure to substantiate a ten-factor solution explaining covariance among personality disorder symptoms. This failure has rightly led to concerns over the validity of the construct of Section II BPD [43–45]. While we have been in full agreement with these concerns, we have argued that Section II BPD (like Criterion A) may represent the common or core features shared by all personality pathology [46–49]. This argument is based on (1) the fact that, compared to other personality disorders, which were largely reduced to purely behavioral manifestations of personality pathology with the transition to DSM-IV, BPD still contains explicit criteria reflective of intrinsic maladaptive self and interpersonal function, and (2) recent empirical evidence that BPD appears to load exclusively onto a general factor of personality pathology (gPD), while other Section II personality disorders appear to represent specific factors or maladaptive trait constellations [50–52]. It remains, of course, an empirical question to what extent Section II BPD fully captures gPD and therefore Criterion A, but given the suggested overlap (at least in adults), it is possible to argue that BPD, gPD, or Criterion A represents an index of increased severity in psychopathology [48, 49, 53, 54], somewhere along the severity pathway between the internalizing-externalizing spectra and psychoticism [55, 56]. The question then becomes why Section II BPD, gPD, or Criterion A onsets only in adolescence. Indeed, I will argue that the suggested overlap between Section II BPD, gPD, and Criterion A becomes apparent only in adolescence, because adolescence is associated with a distinct pe-

riod of rapid (and in some cases qualitative and therefore discontinuous) developmental changes in Criterion A function, which, as I will show, coalesce around the core concept of self function.

### **Developmental Research on Criterion A Function: Self Development as Nexus**

Criterion A covers a vast array of constructs across self and interpersonal function. Regarding self function, Criterion A evaluates the extent to which an individual demonstrates integrated identity function (unique sense of self, stable and accurate self-esteem, and adequate self-regulation) as well as self-direction (meaningful short-term and life goals, adequate standards of behavior, and self-reflection). Regarding interpersonal function, Criterion A evaluates the extent to which an individual shows empathy or mentalizing capacity (comprehension of others, tolerance of differing perspectives, and understanding the impact of their behavior on others) as well as the capacity for intimacy (depth and duration of a meaningful connection with others, the desire and capacity for closeness, and mutuality of regard for others). Since Criterion A was only introduced in the DSM system in 2013, it will take time for research to accumulate on the developmental course of Criterion A function exactly as it is presented in the DSM-5. In addition, many conceptual and methodological issues have to be addressed in order to adequately chart the developmental course of DSM-5-based Criterion A function. For instance, measures of Criterion A seem to suggest a 4 (identity, self-direction, intimacy, empathy)  $\times$  3 (components of each construct)  $\times$  5 (levels) matrix, while the original conceptualization of Criterion A was suggested to be unidimensional [57]. While the field awaits these clarifications, it is worth delving into the rich, deep, and broad developmental literature on the typical development of the concepts that make up Criterion A. For instance, much is known about the typical development of identity, self-esteem, self-regulation, self-reflection, goal-setting, perspective-taking, comprehension of others, and the quality and duration of close relationships in children and adolescents, and as it turns out, all of these developmental processes coalesce to support the development of an integrated sense of self [58] (in this sense, a developmental perspective would argue in favor of Criterion A as unidimensional, or constituting a general and specific factor structure). While a full and detailed review of this literatures is beyond the scope of this article, I will present it here in abbreviated form to show how the onset

of Section II personality disorder in adolescence can be explained with self development as nexus.

As Erikson [59] pointed out 70 years ago, one of the major tasks of adolescence is the establishment of a coherent and integrated sense of self. The establishment of a coherent and integrated sense of self is a precondition for successfully taking on independent and autonomous adult roles and responsibilities that facilitate contributions to society and procreation [7]. To achieve this, adolescents must successfully navigate the process of becoming a separate individual while remaining connected to others – most notably parental attachment figures. The normative and neurobiologically-based increase in risk-taking and exploration behaviors help facilitate the push towards independence [60], alongside significant advances in the metacognitive capacity for self-reflection that facilitates the ability to, for the first time, ask questions such as “Who am I?,” “How do I want others to view me?,” and “How do I fit into the larger social world?” [58]. The developmental building blocks of these capacities are of course observable from early childhood onwards. Preadolescent children are, for instance, able to compare different attributes about the self. We are also able to chart adaptive and maladaptive function in Criterion A-related concepts (e.g., delayed mentalizing ability, reduced empathy, problems in self-regulation). However, it is not until adolescence that young people are able to integrate varying abstract concepts into a coherent and organized whole. By late adolescence, they rely much less on direct social comparison with peers or feedback from others and begin to adhere to a view of themselves in terms of personal standards and moral beliefs associated with increases in self-directedness and self-esteem [61]. Therefore, while the disparate aspects of Criterion A are as readily observable in preadolescence as are traits, the coalescing of these aspects into a unidimensional severity continuum does not come together (“bind”) until adolescence. Here, I argue for self as the nexus around Criterion A aspects coalesces.

McAdams and Olson [62] state that it is during adolescence that the “binding” of the personality begins, because, for the first time, metacognitive capacities are mature enough to handle the work of holding in balance different views of the self-in-relation-to-others. The development of self builds on a strong foundation of prior and continuing attachment security with parents and high-quality relationships with peers [63, 64]. In turn, an integrated sense of self facilitates the maintenance of strong interpersonal relationships within and outside the home. Strong attachments to parents and peers and interpersonal effectiveness are facilitated by the capacity for empathy or mentalizing, which

shows rapid growth and expansion in adolescence – in some cases reflecting discontinuous maturational shifts. In particular, social neuroscience research suggest an anterior-to-posterior developmental shift in brain regions supporting mentalizing during adolescence. The well-validated linear age-related decline in dorsomedial prefrontal cortex responses during mentalizing tasks appears to be joined by linear and nonlinear (discontinuous) patterns of developmental change in other regions associated with simulation, which are highly sensitive to affective contributions [65]. The proliferation of the social brain in terms of perspective-taking, mentalizing, and empathy also allows for the development of social emotions such as shame and guilt, which facilitates adult moral functioning and allows the young adult to begin to regulate the self within his/her social context. With the expansion of the social brain, in conjunction with qualitative (discontinuous) shifts in sexual maturity and identity, adolescents are poised for adult intimacy, again informing the developing self in significant ways. Identity, self-direction, intimacy, and empathy are therefore intractably linked and remain interconnected through adolescence into adulthood to support the development of self [66].

In summary, developmental research suggests that Criterion A concepts (identity, self-direction, empathy, and intimacy) coalesce around the development of self, marking a discontinuous (qualitative) shift in development that enables the adolescent to take on independent adult role function, which is demanded from the environment. The concepts of developmental continuity and discontinuity are well known in developmental psychology and developmental psychopathology [67]. Maturation that is continuous does not change in structure or form, but follows a continuous course – for instance, height. In contrast, maturation that is discontinuous (e.g., the development of primary and secondary sexual characteristics) involves qualitative change. Whether maturation is continuous or discontinuous may be important for a variety of reasons; however, it seems more important to focus attention on the extent to which developmental changes, whether continuous or discontinuous, transform functioning. For instance, locomotion markedly increases a toddler's ability to explore and control their environment, and the development of language opens up new opportunities for social communication [67]. Similarly, the development of an integrated and coherent sense of self changes the adolescent's psychological situation to the degree that they are able to begin taking on adult social role function (“work and love”). Trait development (which represents a continuous change process) does not appear to have the same

transforming quality, probably because it is descriptive in nature. Thus, while a developmental course for trait function has been described, the ebb and flow of trait development cannot account for the onset of Section II personality disorder in adolescence. Put differently, traits are unable to explain changes in behavior during different age periods and can therefore not account for the onset of personality disorder in adolescence. Here, I argue that personality disorder ensues when an integrated and coherent sense of self fails to develop, resulting in nonfulfilment of adult role function. Adaptive self function (which is intractably linked to adaptive interpersonal function) constitutes a developmental milestone that, if missed, impedes the binding of personality and ultimately the transformation from child to adult personality function.

### **Clinical Implications and Future Research Directions**

While the empirical research reviewed in this paper reasonably points to the views presented here, several hypotheses remain untested. Longitudinal data that chart the developmental course of aspects of DSM-5 Criterion A in conjunction with measures of Criterion B and more traditional measures of psychopathology (e.g., Section II BPD and measures of the internalizing-externalizing spectra) can clarify the respective contributions of Criteria A and B in (1) explaining the onset of personality pathology and (2) disentangling (or confirming overlap) between Criterion A, Criterion B, and the internalizing-externalizing spectra. If it is indeed true that Criterion A accounts for the binding of personality into a unidimensional severity continuum during adolescence, then it is important that interventions explicitly scaffold this binding. Elsewhere, we have argued that interventions aimed at enhancing mentalizing capacity during adolescence are key to healthy personality development [54, 68]. These interventions focus on slowing down thinking and feeling around self and others so that an adaptive and integrated sense of self emerges that can effectively guide the important decisions adolescents take as they age into adulthood.

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