

Parenting and the Development of Borderline Personality Disorder

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There is an interesting conceptual similarity between domains of dysfunction in borderline personality disorder (BPD) and developmental tasks of early childhood (Macfie, 2009; Sroufe, Egeland, Carlson, & Collins, 2005). BPD has been described as a disorder of *attachment*, with symptoms of fear of abandonment and unstable and intense relationships (Fonagy, Target, & Gergely, 2000; Gunderson, 1996; Liotti & Pasquini, 2000). BPD has been described as a disorder of *self*, with symptoms of identity disturbance, feelings of emptiness, and dissociative symptoms (Westen & Cohen, 1993). BPD has also been described as a disorder of *self-regulation*, with symptoms of impulsivity, suicidal behaviors, self-mutilation, affective instability, and difficulty controlling anger (Posner et al., 2003). Children address the developmental tasks of *attachment* to caregivers in the first year, *self-development* with the beginnings of autonomy in toddlerhood, early *self-regulation* of emotion and behavior in the preschool period, and rework each in adolescence (Macfie, 2009; Sroufe et al., 2005; Sroufe & Rutter, 1984). It is an empirical question whether or not BPD has its origins in part in failure to negotiate early childhood tasks. In the current chapter we assess the existing evidence for such a model, focusing

particularly, but not exclusively, on the role of parenting. We then propose future directions for research and implications for interventions.

Definitions and Scope

BPD may be assessed with a categorical diagnosis from a clinical interview (American Psychiatric Association, 1994, 2000; Gunderson, Kolb, & Austin, 1981). In addition, BPD may be assessed along a continuum by counting number of symptoms. Borderline features, derived from factor analysis, may also be assessed along a continuum with a self-report questionnaire (Morey, 1991, 2007). They include: affective instability, negative relationships, identity disturbance and self-harm, all of which correlate highly with a diagnosis of BPD (Morey, 1991, 2007). However, recent studies have suggested a unidimensional factor structure for BPD (see Chap. 4). The advantage of a diagnosis is that it brings to mind a particular clinical presentation (one that may vary, however, depending on the constellation of symptoms) and places individuals in groups. The advantage of a continuous measure is that everyone appears somewhere along the continuum. In this chapter we conceptualize BPD as first appearing in adolescence (Ludolph et al., 1990) or early adulthood (American Psychiatric Association, 2000), but argue that precursors may appear in childhood

“Parents” in the literature usually refers to mothers rather than fathers or both parents (Seifer

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& Dickstein, 2000). The term “caregivers” often replaces “parents” in the child development literature in order to acknowledge that people other than parents are likely and qualified to bring up children. However, in this chapter, research reviewed is limited to biological parents, and so the term “parents” is retained, with mothers referred to when appropriate.

Blaming parents, specifically mothers, for the development of psychopathology has a long and ignominious history including “schizophrenogenic” mothers for schizophrenia (Fromm-Reichmann, 1948) and “refrigerator” mothers for autism (Bettelheim, 1967; Kanner, 1949). A “mother-bashing” quality has also been noted in literature on depressed mothers (Downey & Coyne, 1990). It is important to emphasize that it not possible to disentangle the effects of genetics and environment in most studies (Sameroff & Chandler, 1975; Seifer & Dickstein, 2000), that BPD has a large genetic component (Torgersen et al., 2000), and that problems with parenting may best be conceptualized as the result of individual factors such as parental psychopathology in interaction with stressful contexts.

Indeed, the determinants of parenting include the psychological resources of the parent as well as qualities of the child and the balance between stress and support in the environment (Belsky, 1984). Parenting can be viewed at the level of the individual parent with constructs such as sensitivity, hostility, intrusiveness, and supportiveness (Biringen, Robinson, & Emde, 1998). Parenting can also be viewed at the level of the family system (Cox & Paley, 1997) including dyadic assessments of infant–parent attachment (Ainsworth, Blehar, Waters, & Wall, 1978) and of parent–child role reversal (Macfie, McElwain, Houts, & Cox, 2005). Parents who have psychopathology put their children at high risk of developing the same disorder (Downey & Coyne, 1990; Mednick & McNeil, 1968), which we discuss in terms of BPD.

Theoretical Background

We review the literature on parenting and the development of BPD from a developmental

psychopathology perspective (Cicchetti, 1984; Cicchetti & Toth, 2006; Sroufe & Rutter, 1984). Developmental psychopathology takes a life-span approach to studying pathways to disorder versus resilience. Success or failure at stage-salient tasks, including attachment, self-development, and self-regulation in early childhood, may make the development of psychopathology more or less likely. Study of children who are at high risk of developing the disorder (such as offspring of mothers who have the disorder) along with normative comparisons is useful. Not only does normative development inform atypical development, but atypical development informs normative development, and both may inform interventions to bring development back on track and prevent the development of psychopathology.

Parenting changes as a child develops (Sroufe et al., 2005). For a secure attachment relationship to develop between the infant and the parent, parenting needs to be consistently sensitive and responsive. For self-development to develop in the toddler period, parenting becomes more challenging. While still being consistently sensitive and responsive, a parent also needs to balance support for a child’s autonomy with setting limits to keep him or her safe, teaching social mores, and helping to resolve tantrums. Building on a secure attachment, the beginnings of autonomy, and dyadic regulation, a child in the preschool period develops the beginnings of self-regulation and is able to meet the expectations of a preschool setting. In adolescence, attachment is revisited in romantic relationships, self-development in establishing an identity, and self-regulation in the context of hormonal changes affecting mood, potential availability of drugs and alcohol, less parental oversight, and the gap between physical maturation and taking adult social roles. Indeed, adolescent development in the USA may look a little like BPD (Macfie, 2009).

A child’s early experience with parents may be studied at the level of behavior and also at the level of mental representation. In order for an early experience to influence later development it has to be internalized (Carlson, Sroufe, & Egeland,

2004). Mental representations, also termed internal working models or schemas, are thought to develop from a child's early attachment relationships and provide templates to predict others' behavior, guide the child's own behavior, and shape the child's view of him or herself (Ainsworth et al., 1978; Bowlby, 1969/1982, 1973, 1980; Bretherton & Munholland, 2008; Young, 1990). Thus a child with a secure attachment in infancy is thought to develop representations of others as trustworthy, the self as worthy of care, and be well able to regulate emotions and behavior as he or she embarks on relationships with teachers and with peers. On the other hand, a child with an insecure attachment may develop representations of others as rejecting or ambivalent, the self as not worthy of care, and tend either to under or overregulate emotions in future relationships.

A child who is unable to form an organized attachment in infancy (secure or insecure) is classified as disorganized (Hesse & Main, 2006; Main & Solomon, 1990). Disorganized attachment develops in the context of the parents being seen as either frightening (e.g., maltreating) or frightened (e.g., grieving a recent loss). When distressed, the infant in a disorganized attachment appears to be caught between approach and avoidance, wanting comfort but afraid to be close to the parent. This results in bizarre behavior such as approaching the parent but backwards, stereotypies such as finger-flicking, or standing still staring as if in a trance (Main & Hesse, 1990). Thus the infant-parent attachment system, designed to buffer the infant from stress, is disorganized and the infant remains hypervigilant and fearful (Solomon & George, 2011). A child with a disorganized attachment may develop confused and contradictory internal working models of others and of self, and may have difficulty regulating emotions resulting in atypical responses such as dissociation and self-harm.

Atypical representations formed in early relationships with parents and carried forward to adolescence or early adulthood are theorized to make the development of psychopathology more likely (Bowlby, 1977). To gain a window

on these representations with preschool children we can ask children to complete the beginnings of stories about challenging family situations presented to them with household props and family dolls (Bretherton, Oppenheim, Buchsbaum, Emde, & the MacArthur Narrative Group, 1990). The resulting videotaped narratives can then be coded for themes of interest.

Parents' representations of their own childhood experience, assessed from transcripts of semi-structured Adult Attachment Interviews, AAI (George, Kaplan, & Main, 1984; Main & Goldwyn, 1991; Main, Goldwyn, & Hesse, 2002), may also be coded and their effect on their parenting and on their children's representations examined. AAIs are coded as secure (free to discuss childhood experiences coherently), insecure (incoherently preoccupied with, or dismissive of, difficult childhood experiences), and unresolved with respect to the experience of loss or abuse. Adults with BPD are mostly classified as preoccupied and unresolved (Bakermans-Kranenburg & van IJzendoorn, 2009). Furthermore, adults with BPD are characterized as displaying more hostile/helpless representations on the AAI (Lyons-Ruth, Melnick, Patrick, & Hobson, 2007). In turn, mothers' unresolved (Main & Hesse, 1990) and hostile/helpless (Lyons-Ruth, Bronfman, & Parsons, 1999) AAI representations predict disorganized attachment with their infants.

Empirical Background

There are no definitive studies which elucidate the relationship between parenting and the development of BPD in adolescence or adulthood over time. Retrospective reports of childhood experience from adults who have BPD provide a rich source of data, although reports of problematic parenting may reflect current salience more than etiological significance. Retrospective reports also rarely differentiate between experiences in different developmental periods, and so are unable to identify disruptions in particular developmental tasks implicated in the etiology of BPD. Prospective longitudinal studies that assess

development between infancy and adulthood avoid retrospective bias, include many different factors, but, depending on the sample, may not result in a high percentage of BPD diagnoses. Studies of children at high risk of developing BPD in adolescence or adulthood, including maltreated children and offspring of mothers with BPD, may also help identify putative precursors to BPD, but need to be followed longitudinally.

Retrospective studies. There is a large literature on the relationship between retrospective reports of childhood maltreatment and BPD in adults, which is addressed in full elsewhere (see Chap. 16). Here we review studies of parental factors that may be conceptualized as falling in the domain of attachment (separation from parents), self-development (overprotection, inappropriate punishment, inconsistency, and role reversal), and self-regulation (emotional withdrawal and invalidation of thoughts and feelings).

Separation from parents during childhood, thus disrupting the attachment relationship, is frequently reported by adults who have BPD. Individuals with BPD are more likely to report having been placed in foster care or being raised by a non-parent as children than are normative comparisons (Bandelow et al., 2005) or individuals with other psychiatric diagnoses (Ludolph et al., 1990). Moreover, separations from parents before the age of 5 are more commonly reported by adults with BPD (and by those with antisocial personality disorder), than by adults with dysthymia together with any other personality disorder (Zanarini, Gunderson, Marino, Schwartz, & Frankenburg, 1989). Furthermore, adults with BPD are more likely to report their fathers having been absent during their childhood than are individuals with depression or schizophrenia (Soloff & Millward, 1983), or with diagnoses other than BPD (Frank & Hoffman, 1986). Adults with BPD also more frequently report divorce of their parents than do those with depression or schizophrenia (Soloff & Millward, 1983) or normative comparisons (Bandelow et al., 2005).

In addition to attachment, retrospective reports of adults with BPD also include factors

that may be related to children's self-development: overprotection, inappropriate punishment, inconsistency, and role reversal. Adults with BPD report more overprotection than do those with schizotypal personality disorder (Torgersen & Alnæs, 1992), and reports of parental overprotection are correlated with borderline features in college students (Nickell, Waudby, & Trull, 2002). In addition, more adults with BPD report that their parents used inappropriate punishment than do individuals with other diagnoses (Frank & Hoffman, 1986), and normative comparisons (Bandelow et al., 2005). Moreover, adults with BPD report having experienced more inconsistent treatment by their parents than do those with other personality disorders (Zanarini et al., 1989, 1997, 2000). Finally, adults with BPD report more role reversal with their parents, with the child placed in the role of parent, than do those with other personality disorders (Zanarini et al., 1997).

Retrospective reports by individuals with BPD also include factors that may be related to self-regulation: emotional withdrawal and invalidation of thoughts and feelings. Adults with BPD are more likely to report that their parents withdrew emotionally from them during childhood than are those with other disorders (Zanarini et al., 1989, 1997, 2000). Adults with BPD are also more likely to report that their parents denied the validity of their thoughts and feelings than do individuals with other personality disorder (Zanarini et al., 1997, 2000).

Concurrent studies. Young women with BPD report less current protection in their relationship with their mothers than did those without BPD. Moreover, on arriving at the lab with their mothers for a problem-solving discussion, the young women with BPD demonstrated a higher cortisol response than did comparisons (Lyons-Ruth, Choi-Kain, Pechtel, Bertha, & Gunderson, 2011)

Prospective studies. There have been several studies that assess the development of BPD longitudinally. In the first reviewed here, children at risk due to being born into poverty were followed from birth to age 28 (Carlson, Egeland, & Sroufe, 2009). A wide range of endogenous factors

(including activity level at 6 months and emotionality at 30 months) and environmental factors (including life stress between 3 and 42 months) were significantly correlated with the number of BPD symptoms in adulthood. In the domain of attachment, maltreatment assessed in infancy and between age 4 ½ and 18, disorganized attachment age 12–18 months, maternal hostility at 42 months, and family/father disruption from 12 months to 18 years, were associated with BPD symptoms age 28. In the domain of self-development, role reversal at 42 months, and at 13 years, were associated with BPD in adulthood. In the domain of self-regulation, children's attentional disturbance and emotional and behavioral instability at age 12 were correlated with BPD symptoms age 28 (Carlson et al., 2009).

In addition to examining development at the level of behavior, this longitudinal study also assessed children's representations. Self-representation disturbance age 8–12 was associated with BPD symptoms in adulthood, and mediated the relationship between disorganized attachment with mothers in infancy and BPD symptoms in adulthood (Carlson et al., 2009). This study has made a very important contribution to our understanding of the relationship between child development and BPD. However, by age 28, only 2 % ($N = 4$) had actually developed BPD (E. Carlson, personal communication, August 8, 2010).

In a prospective study in a community sample, family adversity, suboptimal parenting, and conflict between parents predicted BPD symptoms age 11 (Winsper, Zanarini, & Wolke, 2012). In the same sample, extended separations from mother prior to age 5 predicted BPD symptoms from early adolescence to middle adulthood (Crawford, Cohen, Chen, Anglin, & Ehrensaft, 2009). When these mothers were assessed with their adolescents average age 14 years at Time 1 and 16 ½ years at Time 2 (Bezirgianian, Cohen, & Brook, 1993), 10 % of the adolescents at Time 1 were diagnosed with BPD using a DSM structured clinical interview, and 7 % at Time 2. Mothers' parenting was assessed with self-report questionnaires, thus avoiding biases both of retrospective data and of children's reporting

on their mothers' parenting, mothers being more likely to under- rather than overestimate problems. Maternal inconsistency in the context of high maternal over-involvement (defined as a role reversal in which the mother depends on the child to meet her needs) at Time 1, predicted the persistence or emergence of BPD and no other personality disorder at Time 2. Furthermore, in another study using the same longitudinal data, low parental affection and aversive parental behavior when the children were average age 6 were associated with BPD at average age 22 and 23. However, these factors were not specific to BPD: they were also associated with the development of other personality disorders (Johnson, Cohen, Chen, Kasen, & Brook, 2006).

A separate longitudinal study of adolescents in a community sample (Arens, Grabe, Spitzer, & Barnow, 2011), tested Marsha Linehan's biosocial theory that invalidating parenting interacts with biological vulnerabilities to cause BPD (Linehan, 1993). Indeed, an interaction between the adolescents' temperamental trait of harm avoidance with perceived maternal overprotective parenting at age 15 predicted BPD at age 20. The authors conclude that overprotective parenting may inhibit the development of adaptive emotion regulation. When a child displays negative emotions, the mother may respond by being overprotective, which hampers the child from trying out emotion regulation strategies on his/her own. However, findings were not specific to BPD: they did not differ for those who were diagnosed as depressed (Arens et al., 2011).

Putative precursors to BPD in at-risk groups. Groups at risk for developing BPD include maltreated children and offspring of women with BPD (Lenzenweger & Cicchetti, 2005). Study of these groups may therefore inform the relationship between parenting and the development of BPD. A cross-sectional study of maltreated school-age children (assessed for having experienced sexual abuse, physical abuse, emotional abuse, and neglect), examined a composite of putative precursors to BPD in the domain of self-regulation: self-reports of affective lability, lack of conscientiousness, conflicted relationships, self-harm, and peer reports of

“upsets others,” relational aggression, and “is disliked” (Rogosch & Cicchetti, 2005). In terms of the relevance to parenting, although the perpetrators of maltreatment were not identified, parents are known to be the most common perpetrators (U. S. Department of Health and Human Services, 2010), and parental neglect may facilitate maltreatment by others. Maltreated children scored higher than did nonmaltreated comparisons on the composite. There were no significant differences between physically abused, sexually abused, and neglected children, and emotionally abused children did not differ from nonmaltreated children. Lending credence to the likelihood of these being precursors to BPD, children high on the composite were less efficient in their attentional processing, a deficit characteristic of adults with BPD, than were other children (Rogosch & Cicchetti, 2005).

Offspring of women with BPD are also at high risk of developing BPD. Although there are no studies of the prevalence of BPD in offspring specifically, as noted above, BPD has a large hereditary component (Torgersen et al., 2000), and first degree relatives of those with BPD are more likely to have the disorder than are those in the general population (Links, Steiner, & Huxley, 1988; Loranger, Oldham, & Tulis, 1982; Zanarini, Frankenburg, et al., 2004). Parenting of mothers who have BPD may therefore inform the relationship between parenting and precursors to BPD, with a higher percentage of children actually developing BPD than is found in normative and poverty at-risk samples.

In the domain of attachment, mothers with BPD demonstrate more intrusive insensitivity when their infants are 2 months (Crandell, Patrick, & Hobson, 2003) and 13 months (Hobson, Patrick, Crandell, Garcia-Perez, & Lee, 2005), and more frightened/disoriented behavior with their 1-year-old infants (Hobson et al., 2009), than do normative comparisons. Moreover, at 13 months, 80 % of these infant offspring are classified as disorganized in their attachment to their mothers (Hobson et al., 2005), the same percentage found in maltreated children (Carlson, 1998). Furthermore, mothers

with BPD are less sensitive and more hostile than are normative comparisons (Macfie et al., 2007). Additionally, offspring of women with BPD age 4–7 are more likely to have been maltreated than comparisons (Reid, Campion, Watkins, & Macfie, 2007).

In the domain of self-development, infant offspring of women with BPD, age 3–26 months are less responsive to, and interactive with, their mothers than are normative comparisons (Newman, Stevenson, Bergman, & Boyce, 2007). Similarly, children age 4–7 of mothers with BPD are less responsive to, and involving of, their mothers than are normative comparisons (Macfie et al., 2007). In the domain of self-regulation, compared with normative comparisons, offspring of women with BPD age 4–7 are more emotionally reactive and withdrawn, with symptoms associated with affective disorders, anxiety disorders, and attention deficit hyperactivity disorder (Campion et al., 2011). Moreover, offspring of women with BPD display more behavior problems age 4–18 than do offspring of women with other personality disorders (Weiss et al., 1996), and more behavior problems at age 11–18 than do offspring of depressed mothers, mothers with Cluster C personality disorders, and normative comparisons (Barnow, Spitzer, Grabe, Kessler, & Freyberger, 2006).

Mothers with BPD are less close to, and less supportive of autonomy for their adolescents, and their adolescents are more likely to change their opinions to placate their mothers, than are normative comparisons (Frankel, McCullum, Trupe, Jones, & Macfie, 2009). These adolescents are also more likely to demonstrate more general, verbal and relational aggression, and self-harm than are normative comparisons (Swan, Campion, Watkins, Price, & Macfie, 2009), and are more preoccupied in self-report measures of romantic attachment (Watkins et al., 2009). Importantly, offspring age 14–17 also report more borderline features themselves than do normative comparisons (Watkins et al., 2011).

At the level of representation, offspring of women with BPD age 4–7 display more putative precursors to BPD than do normative comparisons. In the domain of attachment, offspring of women

with BPD, compared with normative comparisons, tell stories with more negative mother-child and father-child relationship expectations and fear of abandonment; in the domain of self-development, they tell stories with more role reversal, incongruent, and shameful representations of the self; and in the domain of self-regulation they display more narrative incoherence, confusion between self and reality, confusion between self and fantasy, and fantasy proneness, the latter three being associated with dissociation (Macfie & Swan, 2009). Furthermore, narrative representations thought to be related to BPD symptoms (fear of abandonment, role reversal, incongruent child, confusion between self and fantasy, and destruction of objects) are associated with their mothers' preoccupied/unresolved representations of their own childhood assessed with the AAI (Macfie, Swan, Fitzpatrick, Watkins, & Rivas, in press). These representations may be transmitted from one generation to the next with implications for the development of BPD. Indeed mothers' parenting mediated the relationship between mothers' preoccupied/unresolved representations of their own childhood and their children's representations of a fear of abandonment (Macfie et al., in press).

A Proposed Model

It is clear from the empirical literature that prospective studies validate retrospective reports of adults with BPD. Maltreatment, separation from parents, parental overprotection and inconsistency, role reversal, and invalidation reported in retrospective studies also predict BPD symptoms or a BPD diagnosis in adolescence or early adulthood. Prospective studies, however, add many important etiological factors including disorganized attachment in infancy and representational development in childhood, which validate the choice of maltreated children and offspring of women with BPD as groups at high risk of developing BPD. Both are characterized by 80 % being disorganized in their attachment with their mothers in infancy and by developing atypical representations in the preschool period. Maltreated children's representations contain

less parent empathy for children, but more child empathy for parents in a role reversal (Macfie et al., 1999), and demonstrate an increase in dissociation across the preschool period compared with nonmaltreated children (Macfie, Cicchetti, & Toth, 2001). The narratives of offspring of women with BPD include negative portrayals in the domains of attachment, self-development, and self-regulation, reviewed above (Macfie & Swan, 2009). Although not all maltreated children nor all offspring of women with BPD will develop BPD, study of their development may inform risk factors for the disorder.

We propose a model of parenting and the development of BPD in Fig. 19.1. Parenting may be affected not only by parent temperament, child temperament, and environmental context, but also by representations of the parent's own childhood experiences. Problematic parenting then predicts infant-parent disorganized attachment. It is theorized that for a disorganized attachment to develop, the infant's distress triggers the parent's own unresolved childhood memories of not being soothed (Fraiberg, Adelson, & Shapiro, 1975). The parent may then feel helpless to care for the infant, and may become angry at demands made by the infant, and may abdicate in part from the role of the parent (George & Solomon, 2008). Because the parent's first priority becomes to soothe him or herself, the parent may display contradictory hostile/helpless responses to the infant's need for comfort and closeness. This may in turn frighten the infant who remains unsoothed (Lyons-Ruth, Bronfman, & Atwood, 1999; Lyons-Ruth & Jacobwitz, 2008; Main & Hesse, 1990). This hostile/helpless stance toward the infant is associated with atypical affective communication (Bowlby, 1988; Main, Kaplan, & Cassidy, 1985), which includes frightening, hostile-intrusive, and role-reversed behaviors (Lyons-Ruth, Bronfman, & Atwood, 1999).

Disorganized attachment in infancy in turn predicts parent-toddler role reversal (Macfie, Fitzpatrick, Rivas, & Cox, 2008). When parents of toddlers encourage their children to focus on their (the parents') needs rather than on their

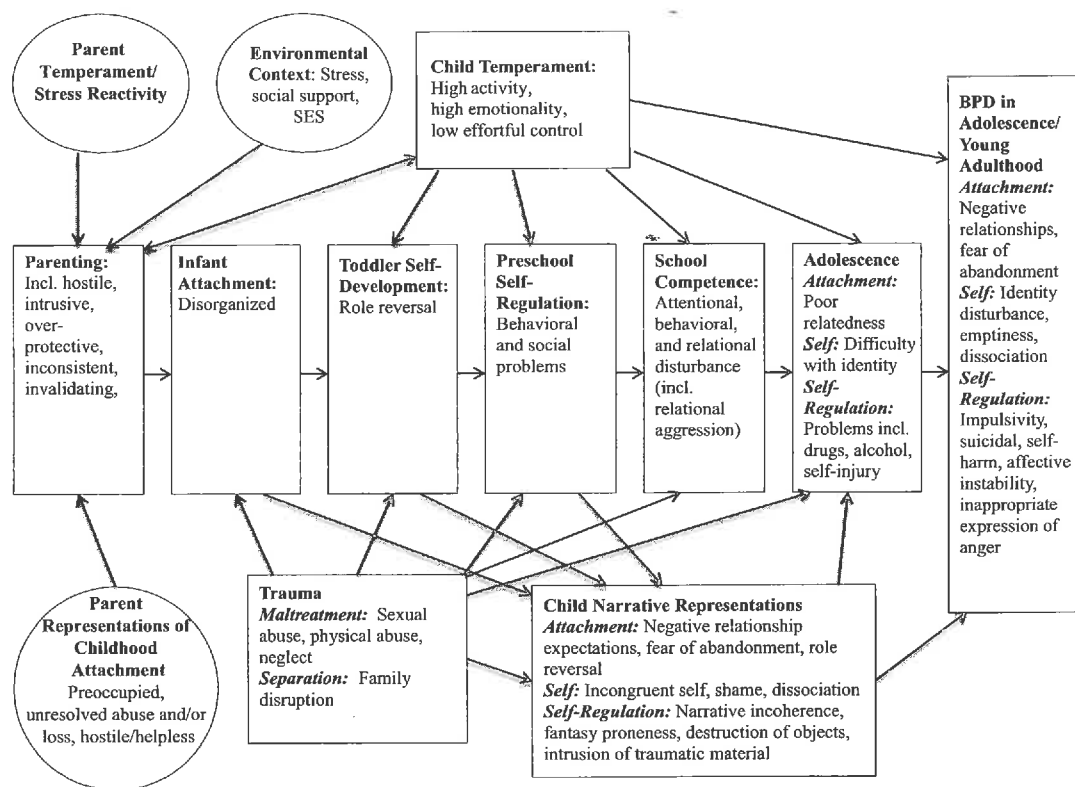


Fig. 19.1 Parenting and the development of BPD—a proposed model

own, the development of autonomy and self-regulation suffer, the need for care remains unfulfilled. In a study of mother-child role reversal in a normative sample, role reversal is repeated in the next generation as children seek to meet the need for care with their own children: a girl grows up to look to her daughter for care, and a boy grows up to marry a woman who looks to their son for care (Macfie, McElwain, et al., 2005). Role reversal in turn predicts problems with self-regulation in kindergarten (Macfie, Houts, McElwain, & Cox, 2005), which may then affect school functioning and peer relationships, which lead to problems in adolescence. Difficulty in adolescence in the domain of attachment extends to romantic relationships, difficulty with self-development extends to identity, and difficulty with self-regulation extends to impulsive, self-damaging behaviors including the use of drugs, alcohol, sexual activity, and self-injury. However, failure to negotiate each

developmental task between infancy and adolescence successfully may not lead to BPD specifically. The experience of trauma including maltreatment and separation, and the moderating effects of child temperament, may each play a role. Children with emotionally reactive temperaments who are low in effortful control may be more likely to develop BPD. Moreover, representational development may provide the process by which early developmental failure is carried forward to make the development of BPD more likely.

Future Research

The main goal of future research on parenting and the development of BPD is to inform preventive interventions. BPD is a severe and chronic disorder that involves self-destructive behavior, inappropriate displays of anger, and frantic help

seeking. We know that this combination makes the disorder extremely challenging for health care providers (Gunderson, 2001), a challenge that is costly in terms of individual suffering and in terms of burden on the health care system. For example, in one study 47 % of chronic pain patients were diagnosed with BPD (Sansone, Whitecar, Meier, & Murry, 2001), and individuals with BPD utilize mental health services at higher rates than does any diagnostic group other than schizophrenia (Swartz, Blazer, George, & Winfield, 1990). Seventy to 90 % of individuals with BPD repeatedly attempt suicide or make suicidal gestures (Gunderson & Ridolfi, 2001; Linehan & Heard, 1999), which involve intensive utilization of mental health services (Roy, 2001), and completed suicide occurs in 8–10 % (American Psychiatric Association, 1994; Paris, 1993; Stone, 1990).

In order to design preventive interventions, we ideally need longitudinal studies in high risk samples from infancy to early adulthood. We focus here on offspring of mothers with BPD because a higher proportion than in other risk groups may be expected to develop BPD. In this way, processes underlying success versus failure at developmental tasks in interaction with temperament/stress reactivity, maltreatment/separation, and parenting can be identified. With a better understanding of how BPD develops, both the timing and the target of developmentally informed interventions can be specified. In order to get development back onto an adaptive pathway, we need information on factors both common to developmental failure in general and specific to BPD in particular. What is currently absent from the literature on offspring of women with BPD is the study of stress reactivity, which, in interaction with failure at developmental tasks might potentiate the development of BPD. Disruptions in the HPA axis, including atypical cortisol patterns, which impair the ability of children to manage current stress may, in interaction with environmental variables, make the development of BPD more likely.

We need further validation for two promising measures that assess putative BPD symptoms in school-aged children. For the first, a normative

sample of children in fourth to sixth grade was assessed for putative borderline features three times during a 1-year period (Crick, Murraray-Close, & Woods, 2005). The authors adapted the borderline features scale from the Personality Assessment Inventory, PAI (Morey, 1991) for children. They validated it against assessment of a hostile, paranoid world view, intense and unstable emotion, overly close relationships, and relational aggression, and found considerable construct validity and stability (Crick et al., 2005). For the second, an adult DSM-IV interview has been scaled down for use with children: simpler language, omission of age-inappropriate behaviors, and a more structured format (Zanarini, Horwood, Waylen, & Wolke, 2004). As noted previously family adversity and problematic parenting predicted BPD symptoms aged 11 using this scale (Winsper et al., 2012). Both scales might be compared with each other, and profitably be used with children at high risk for developing BPD, including offspring of mothers with the disorder.

Research on the relationships between parenting, child temperament, and the development of BPD is needed. We know that child temperament (angry tantrums, frequent crying, demands for attention, and reactive mood) predicts BPD symptoms in adolescence and early adulthood (Crawford et al., 2009). However part of the genetic component to BPD may result from an interaction between child temperament and parenting. There is a large body of research indicating that child temperament and parenting influence each other in a bidirectional manner, and that certain temperaments may make a child more susceptible to the effects of negative parenting (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Kiff, Lengua, & Zalewski, 2011). Children with temperaments considered “difficult” (irritable or high in negative emotionality) may elicit parenting behaviors associated with later development of BPD, such as low warmth (Kendler, Sham, & MacLean, 1997), low responsiveness (Koenig, Barry, & Kochanska, 2010), inconsistency (Lengua & Kovacs, 2005), and overprotection/overcontrol (Bridgett et al., 2009).

Finally, longitudinal study of offspring of women with BPD is needed. There has only been one study of offspring of women with BPD and normative comparisons who were followed up over a 11-month period in infancy (Crandell et al., 2003; Hobson et al., 2005). Offspring of women with BPD ideally need to be followed from infancy to adolescence/early adulthood. Not only would this inform the development of BPD and preventive interventions, but, because BPD affects mainly women in their childbearing years, it would also inform the course of BPD over time.

Clinical Implications

In the context of parenting issues, a promising target for intervention to prevent BPD is reflective functioning. Reflective functioning is the ability to understand one's own and others' behavior in terms of beliefs and feelings, also termed mentalization (Fonagy, Target, Steele, & Steele, 1998). Individuals with BPD have the lowest scores on reflective functioning compared with those with other disorders (Fonagy et al., 1996). They may therefore react angrily to what they fear is a threat but is not, often harming their relationships and themselves. In terms of parenting, reflective functioning predicts security of attachment (Fonagy, Steele, & Steele, 1991). Higher reflective functioning would help prevent the development of disorganized attachment, which would in turn help prevent the development of BPD. Mentalization-based therapy (see Chap. 22) is designed to improve reflective functioning by focusing on the relationship between the therapist and the person with BPD. Mentalization-based therapy led to a reduction in BPD symptoms and subjective distress at the end of the intervention and at follow-ups as long as 8 years (Bateman & Fonagy, 1999, 2001, 2008). Rather than wait until BPD has fully developed, preventive interventions targeted at reflective functioning may be instituted with parents of children at risk.

Child-Parent Psychotherapy (CPP) is an attachment-based intervention, which includes a focus on improving reflective functioning in both the parent and the child (Lieberman, 1992). For example, a mother and her young child (infant, toddler, or preschooler) meet with the therapist. The mother feels understood by the therapist, and learns more about her own and her child's feelings, beliefs, and needs, so that the mother-child relationship becomes a greater source of security to the child. Indeed, CPP leads to an increase in attachment security in depressed mother-toddler pairs (Cicchetti, Toth, & Rogosch, 1999) and an increase in positive, and decrease in negative representations in maltreated children's stories (Toth, Maughan, Manly, Spagnola, & Cicchetti, 2002). If the intervention is instituted with mothers with BPD and their children, both mothers' symptoms might improve, and their children's development set onto a more adaptive pathway, away from the future development of BPD. In addition, interventions that aim to prevent a disorder may, inform the etiology of the disorder, including the role of parenting (Cowan & Cowan, 2002).

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Suggested Reading

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