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The developmental line of autonomy in the etiology, dynamics, and treatment of borderline personality disorders

RICHARD M. RYAN
University of Rochester

Abstract

Borderline personality disorder (BPD) is considered as a disorder of autonomy, and is related to both predisposing vulnerabilities and social relationships that fail to support basic psychological needs. Autonomy, which is defined within the self-determination theory as the capacity for self-endorsed action based on integrative, reflective awareness, is discussed as a developmental line that is dependent on specific supports from caregivers. Unresponsiveness, invalidation, or abuse by caregivers is argued to impair the capacity for autonomy and to catalyze an array of processes, both biological and psychological, which impact subsequent development and, in vulnerable individuals, can lead to BPD. Aspects of treatment, including the emphases on validation and acceptance of the patient's experience, and the cultivation of more reflective or mindful regulation of behavior, can be deduced from this analysis of autonomy disturbance, and these in turn have appeared as the cornerstones of effective treatments for BPD.

The field of developmental psychopathology embraces the realization that biological, environmental, and experiential factors are interactive and interdependent in influencing the onset and persistence of behavioral disorders. However, the inherent complexity of psychopathology should not obscure a basic fact that mental health practitioners face daily, namely that the salient or *regnant* precipitating causes of many behavioral disorders lie in social, interpersonal events (Rutter, 2000; Ryan & Deci, 2004). Put more starkly, a necessary condition for many forms of psychopathology lies in failures in empathy, rejection, cruelty, neglect, aggression, excessive control, and unsupportive relationships that can devastate the experiential world of the developing child and leave deep scars evident in both brain functioning and patterned behavior. Viewed in this way, many disorders that may appear maladaptive can also be understood as attempts of vulnerable individuals to cope with the injury and hurt of social interactions with those who should have been nurturing and loving, but were not, and to avoid the residual pain these interactions produced. What the developmental psychopathology perspective adds to this view is that such harmful social contexts, and the circumstances that engender them, can catalyze a cascade of factors, both social and biological, that impact subsequent psychological and behavioral functioning across the life span (Cicchetti & Sroufe, 2000).

This is nowhere more evident than in one of the most problematic clinical presentations of our time: borderline personality disorders (BPDs). In this paper persons with BPD are understood as engaged in a developmental struggle in which both individual vulnerabilities and environmental deprivations and insults conspire to produce conditions insufficient to nurture optimal self-organization and au-

Address correspondence and reprint requests to: Richard M. Ryan, Department of Clinical and Social Sciences in Psychology, Meliora Hall 479, RC Box 270266, University of Rochester, Rochester, NY 14627; E-mail: ryan@psych.rochester.edu.

tonomy. Specifically, BPD is "cultured" in a context where *basic psychological needs* (Ryan, 1995) of the child are thwarted. A diagnosis of BPD thus reflects a culmination of need-thwarting processes that begin in early life, and are manifest in personality and social development throughout childhood and adolescence (Bemporad, Smith, Hanson, & Cicchetti, 1982; Goldman, D'Angelo, & DeMaso, 1993). BPD is thus a personality style that unfolds in the nexus between organismic risk and social contextual supports.

The fact that degradations in supports for the psychological needs of the developing child can be a regnant cause of personality disorders is indicative of a thesis central to *self-determination theory* (SDT; Ryan & Deci, 2000, 2004). SDT frames a growing body of research in the fields of motivation and personality development. The framework suggests that growth and pathology can both be at least in part understood in terms of environmental supports or deprivation of certain essential psychological provisions. Specifically, SDT suggests that there are basic psychological needs concerning autonomy, competence, and relatedness, the interpersonal and cultural supports for which are essential to self-organization and integrity (Ryan, 1995). Considerable research has shown how both between- and within-person variations in supports for these need fulfillments predict wellness versus nonwellness, as well as self-motivation versus passive compliance or helplessness (Deci & Ryan, 2000; Ryan, Deci, Grolnick, & La Guardia, in press). In this article BPD is specifically considered as a disruption of these basic needs, especially the needs for *autonomy* and *relatedness*. Impoverished supports for these needs are argued to foster and magnify the "cracks in the crystal" (Cicchetti, 1991) of the developing self in persons with BPD, resulting in the disrupted capacities for self-regulation and relating to others that characterize this disorder.

The thesis that variations in support for psychological needs critically impacts self-organization in development, especially among those most vulnerable, is also informed by taking a developmental psychopathology perspective. Developmental psychopathology emphasizes that psychopathology is itself an outcome of complex and interacting developmental processes (Cicchetti & Sroufe, 2000). In the case of BPD, my interest is in comparing the normal development of autonomy, and the supports that supply the lattice on which it climbs, with the trajectory of, and supports for, autonomy in those with BPD. Such a comparison brings into greater relief the interdependence of factors (both predisposing and current) pertinent to an individual's vulnerability or resilience to deprivations in need support and trauma. It also makes salient the developmental nature of both autonomy and psychopathology, as processes in early development unfold differently in the presence or absence of social supports and individual vulnerabilities. The factors influencing this unfolding operate at various interpenetrating levels of analysis, from cultural to interpersonal to biological, knowledge of which must be coordinated and integrated. Although the central focus in this paper will be on psychological needs in BPD, this analysis can be integrated with neuropsychological findings related to how autonomy functions, as well as placed in cultural context.

I begin with a discussion of the need for autonomy as defined within SDT, and on the healthy development of autonomy and self-organization across the life span. Central to this discussion is the dependence of autonomous functioning on relational provisions of caregivers, including their ability to be attuned and responsive. BPD is then specifically examined as a reaction to the thwarting of basic psychological needs in vulnerable individuals, and the deleterious affects of this thwarting on subsequent developmental functions and processes, both biological and social. Finally, we briefly consider how effective treatments for BPD specifically target deficits in autonomy and the capacity to connect and relate to others.

Autonomy as a Basic Psychological Need Across Development

Concepts of autonomy play a central role in many theories of development and psychopa-

thology. Classical theories of development have considered movement toward greater autonomy and self-regulation to be a hallmark of healthy development (e.g., Hartmann, 1958; Jahoda, 1958; Loevinger, 1976; Piaget, 1981; Werner, 1948). Similarly, within the literature on parenting and social development the importance of supports for autonomy, as well as the negative impact of controlling environments, figure prominently (e.g., Baumrind, 1971; Grolnick, 2003; Grusec & Goodnow, 1994). Finally, clinical perspectives on the development of psychopathology frequently highlight the disturbance of autonomy as a cardinal issue (e.g., Bruch, 1973; Shapiro, 1981; Winnicott, 1965), and implicate the obstruction of autonomy in the onset of many disorders (e.g., Miller, 1981; Strauss & Ryan, 1987). It thus seems critical to have clarity about the meaning of this central concept in psychological development.

Defining autonomy

Etymologically, the term autonomy refers to "self-rule," and the term thus applies to actions that are initiated and regulated by the *self*. Autonomous behaviors are those that a person willingly endorses. The opposite of autonomy is *heteronomy*, or rule by forces that are experienced as alien to the self. When a person acts autonomously they feel "wholehearted," "together," and "ownership of actions," all common expressions that convey the characteristic sense of integrity and volition essential to autonomy. Moreover, autonomous behaviors are experienced as fully self-endorsed because they are informed by and reflective of abiding needs and values, and fit within the actual circumstance to the best of a person's understanding. In this regard, autonomy is therefore often described as behavioral regulation that is consciously accessible (Deci & Ryan, 1980; Siegel, 1999), reflective (Bleiberg, 2004; Friedman, 2003), mindful (Brown & Ryan, 2003), and integrative (Shapiro, 1981; Ryan, 1995).

An important issue for developmental theory is distinguishing autonomy from independence. According to SDT, autonomy concerns volition, whereas independence concerns not relying on others. In this view a person can be autonomously dependent, or autonomously independent in different circumstances. According to SDT, people are often more willing to rely or depend on those who are autonomy supportive, whereas a controlling context leads people to avoid dependence and reliance, often to their own detriment (Ryan, 1993; Ryan & Lynch, 1989).

Similarly, autonomy can be distinguished from narcissism, or self-concern, which Kohut (1977) linked with persons who have suffered from a thwarting of the psychological needs of the self (e.g., inconsistent or impoverished mirroring). More narcissistic persons experience others as "self-objects," or in terms of their own needs, rather than as distinct individuals, and in this reliance on external provisions they are less able to affectively care for and regulate themselves. In contrast, more autonomous persons have internalized the soothing and mirroring functions of caregivers so as to be able to self-regulate. This provides the foundation for confidence and volition, as well as for more mature forms of relatedness. Thus, whereas autonomy derives from a history of need support, narcissism grows out of a history of need deprivation or impingement.

The concept of autonomy also relates to distinctions between self-regulation and self-control, and between true volition versus intentionality (Deci & Ryan, 1987). Although many actions reflect cognitive control, not all of controlled actions are self-endorsed or reflective. For example, a compulsive action may be controlled but may not feel in any way truly volitional. Similarly, although all organized actions entail intention, not all intentional behaviors are autonomous. Autonomous behavior has a quality of openness and flexibility, rather than either rigid doggedness or unreflective impulsivity (Shapiro, 1981). It is based on an ability to consider feelings and wishes as well as environmental pressures or constraints, and find some synthesis between these forces (Ryan & Deci, 2004). In persons with BPD, for example, it is clear that much of what they do, even when "intentional" is not experienced as self-endorsed, and instead is experienced as compulsive (forced or alien),

impulsive (non-self-regulated), or dissociated (disowned and unintegrated). It is in this sense that BPD can be described as a disorder of autonomy (Ryan, Deci, et al., in press).

Finally, some clinicians have described autonomy in terms of acting from one's authentic or true self. *Authenticity* refers to feeling (a) that one "authors" or owns one's actions and (b) that one's appraisals and actions are genuine rather than fake, distorted, or unreal. When they are able to be authentic, individuals report greater self-worth, integrity, and well-being (Kernis, 2003; Ryan & Deci, 2004). Similarly, Winnicott (1965), who elaborated the object relations approach initiated by Fairbairn (1952), suggested that when acting from their *true self* people feel real and "in touch" with their core needs and emotions. True self is the basis of informed, "wholehearted" behavior, and is associated with a sense of initiative and vitality. In contrast, when acting from false self, people display "as-if" personalities that represent attempts to cope with nonaccepting or invalidating social contexts (Miller, 1981). False self involves "taking in" aspects of the social context without truly accepting them as one's own, or reactively adjusting to external demands. It entails a split between outer presentation and deeper feelings and needs, a salient feature of BPD.

Autonomy as a form of functioning

Although defined primarily in phenomenological terms above, autonomy is grounded in and dependent upon specific forms of biological functioning (Ryan, Kuhl, & Deci, 1997). As a quality of regulation, autonomy is characterized by an open processing of possibilities and a matching of these with sensibilities, needs, and known constraints. Obviously, such quality and depth of processing depends upon quite complex neurocircuitry, whose topography differs from more controlled motivational processes (Ryan, Deci, et al., in press; Walton, Devlin, & Rushworth, 2004). In general terms, autonomy depends upon coordination between prefrontal cortical regions that oversee and integrate regulation, subcortical striatal–thalamic areas that promote or inhibit motivation, and inputs from the hippocampus and amygdala that provide contextual and affective information (e.g., Bradley, 2000; Chambers, Taylor, & Potenza, 2003). As Walton et al. state, neural mechanisms "differ depending on whether we are told what to do or are able to exercise our volition" (2004, p. 1259). Thus, to support autonomous functioning, executive functions must be both selective and fully informed by affective and memory related processes. Interference, inhibition or damage in the development or functioning of prefrontal areas and connections with limbic structures produces vulnerabilities to autonomy disturbance, especially when the processing of affectively salient events is entailed (e.g., Bechara, Tranel, Damasio, & Damasio, 1996; Bradley, 2000).

The concept of autonomy thus refers to integrated regulation, or regulation organized and overseen by the self, but it is also apparent that this is always a relative concept, in that actions can be more or less characterized by autonomy. Moreover, as both the self and the social demands and tasks that beset it have to develop, autonomy has to be understood in a developmental perspective that considers both the changing regulatory capacities of individuals over the life course, and the changing demands they are called upon to regulate (Ryan & La Guardia, 2000). This requires the consideration of autonomy as a *development line* (Freud, 1965) or as a construct with continuity across the various changing faces and phases of psychosocial development.

How Autonomy Develops

The infant cannot be said to possess anything like the autonomy described in healthy adults, which entails a capacity for reflective awareness, self-endorsement, and capacities for executive control. Nonetheless, the propensity to experience and exercise autonomy is present from the very early moments of life (Stern, 1985) and yet must be nurtured and supported by a social environment to develop. Humans are "designed" to develop capacities for autonomy, but this design can be derailed or thwarted as well (Deci & Ryan, 2000; Slavin & Kriegman, 1992).

Autonomy development is particularly impacted by the qualities of early relationships. As Barkley states it, the capacity for autonomous regulation "emerges as a result of an interaction between the child's maturing neurological capacities for self-regulation (the executive functions) and his or her interactions with a social environment that stimulates, encourages, and places a premium on such behavior" (1997, p. 227). Clearly, insofar as infants cannot regulate emotions, readily comfort themselves, or gratify their own needs, they are dependent on others to both care for and "organize" experience. Opportunities to exercise and therefore develop autonomy are thus dependent upon the capacity of the infant and young child to participate in scaffolding relationships with caregivers that are characterized by attunement or sensitivity to the infant's inner signals, affects, and needs (Bleiberg, 2004; Siegel, 1999). This provides in an immediate sense a regulatory system *for* the child, as well as a set of experiences that can be internalized and used to guide the ongoing regulation of experience (Fairbairn, 1952).

Attunement or sensitivity refers to caregivers' capacities to read and anticipate the needs and experiences of their child, and to respond to them in a timely and appropriate way. This attunement and responsiveness is by definition autonomy supportive because in it the caregiver appreciates and contingently responds to the internal frame of reference and initiatives of the child, rather than the caregiver's own needs, projections, or fantasies. Indeed, as Bretherton declares, "In the framework of attachment theory, maternal respect for the child's autonomy is an aspect of sensitivity to the infant's signals" (1987, p. 1075).

The responsiveness to signals and needs plays two fundamental roles. First, it helps to modulate affects and internal pressures, allowing the infant to move from mild distress to equilibrium rather than to be maintained in a stressful and disorganized state of mind. Second, responsiveness helps the infant to identify and differentiate its own experiences, and link them with both the emotional appraisals of caregivers, and relevant actions that can yield satisfaction. As Gergely and Watson (1996) describe, a responsive caregiver "gets" the infants experience, and in resonating with it, allows the infant to identify its own mental states. Thus attuned, autonomy supportive parenting entails a mirroring (Winnicott, 1965) of the infant's own experience, and this is essential to the development of a self-reflective function upon which autonomous regulation (the self-endorsed and integrated management of action) depends. Numerous studies have accordingly linked sensitivity and/or autonomy support to outcomes that reflect increased self-organization, initiative, and awareness. For instance, children with more sensitive caregivers evidence more curiosity, intrinsic motivation, resiliency, and adjustment, among other outcomes (Fonagy & Target, 1997; Grolnick, Bridges, & Frodi 1984; Sroufe, 1996).

Although autonomy support is central to the construct of sensitivity, it is not the only type of support contributing to secure attachments and capacities for self-regulation. Supportive caregivers also provide *involvement* and *structure* (Grolnick, 2003; Ryan, Deci, et al., in press). The involved parent dedicates resources to the child in the form of availability, effort, attention, and concrete nurturance. The supportive caregiver also contributes to security and developing autonomy by providing structure in the form of an optimal environment that modulates stimulation in accord with the infant's capacities and state. These contributions help to provide a sense of safety and comfort that are the backdrops of secure relations and the development of competencies. However, even these additional contributions must grow out of a reading of the child's actual needs and emotional states to facilitate the emerging self. For example, high involvement that is low in autonomy support may be more detrimental than low involvement per se (Weiss & Grolnick, 1991). That is, the optimal environment is one that provides resources and introduces structure in a context of autonomy support (Ryan, Deci, et al., in press).

The child's role

In emphasizing the role of the caretaking environment, it bears highlighting that a child

also shapes and influences this environment through his/her own temperament, emotional constitution, and their manifestations. "Temperamental" factors include the infant's soothability, irritability, sociability, and emotional reactivity and intensity (Goldsmith et al., 1987; Rothbart & Derryberry, 1981; Siegel, 1999). Individual differences in temperament are aspects of the child's "starting point" that interact with the caretaking environment and codetermine how formidable a task the development of self-regulation will be for a child and her/his caregivers. For example, children who are irritable or difficult to sooth may impact caretakers' stress levels or mood, which, especially when the adult shares some of the child's vulnerabilities, may make them less nurturing and more likely to act in controlling rather than autonomy supportive ways. As Dix (1991) pointed out, children's challenging behavior can stimulate emotions in parents that undermine their responsiveness, thus making it even more difficult for the children to develop personal autonomy and interpersonal relatedness.

At the same time, a good deal of research suggests that it is the most vulnerable children, from a biological risk standpoint, who benefit the most from more psychologically supportive contexts. As Greenspan states, "the more compromised a child's endowment, short of massive and incapacitating damage, the more powerful and decisive the influence of the nurturing he receives" (1997, p. 143). Of course, this also suggests that failures in ambient supports for the needs of the child may have their most deleterious impact on those predisposed by temperament or genetic endowments to have problems with self-regulation or relatedness.

The characteristics of autonomy support

Autonomy support is a considerably complex process in its own right (Grolnick, 2003; Reeve, 2002; Ryan, 1993). In part, the complexity of the concept relates to the fact that autonomy support is any provision of a caregiver that strengthens and enhances the recipient's sense of self and his or her capacity to reflectively manage or regulate experience and action. This means that the content of autonomy support changes with development, because what supports an infant's nascent self is different from what supports a teenager's self-development, and that is different from what supports an elderly person struggling with dependency. However, among the central elements of autonomy support that are invariant are (a) sharing in the actor's perspective; (b) mirroring and prizing that perspective and the feelings associated with it; and (c) maximizing the recipient's sense of authorship, choice, or initiative in acting or promoting an *internal perceived locus of causality* (de Charms, 1968; Ryan & Connell, 1989) for behavior. Conversely, a controlling relationship is one in which the actor feels pressured or coerced to think, feel, or be certain ways, independent of his or her actual experience or current needs. Controlling relationships vary from those that involve contingent regard and psychological control to those that are physically controlling and coercive.

First and foremost, autonomy support requires that caregiver appreciate the *internal frame of reference* of the child (Ryan, 1993), and be accepting and validating of the child's experience. This is often described as a process of *mirroring* (Winnicott, 1965; Miller, 1981) or reflecting back the child's feelings through one's own empathic resonation. Acceptance and validation of experience by significant adults sets the stage for self-acceptance, and this is particularly true with regard to emotions. Caregivers' failure to respond, or their negative reactions, to certain feelings may be internalized and become nonacceptance of such feelings by oneself. Conversely, responsiveness of adults to the child's emotional expressions, as with any other type of initiation, supports and strengthens the child's sense of agency and autonomy and the child's experience of self as an initiating being.

In contrast, in a controlling environment there is an absence of focus on the child's frame of reference, and instead, pressure or investment for the child to be "what the caregiver wants" (Miller, 1981). This could mean that a caregiver reacts to the infant's stress with anger or neglect, or responds to irritability with the wrong form of comfort because of

projections or insensitivity (e.g., a feeding when the infant is really over stimulated). In either case, the response is not based on an accurate reading of the child, but rather on the needs or projections of the caregiver.

This relates to a second function of autonomy support, namely, the fostering of the child's knowledge of internal states. Opportunities to participate in a relationship with an adult who is attuned to and resonating with the child's own experience facilitates the child's recognition of his or her own inner states. Moreover, appropriate contingent responses by a parent can help a child learn how inner states can be connected with specific actions and gratifications. Controlling environments can alternatively lead to an external focus on regulation and a sense of confusion or helplessness with respect to specific needs as they arise. Moreover, as Bronson highlights, external control through punishment or controlling rewards can also "reduce a child's capacity for self-regulation by arousing emotional responses that limit higher level thinking and flexible executive functioning" (2000, p. 149).

The caregiver's attention to initiatives and echoing to varying degrees the infant's affective signals also provides a learning ground for experiencing synchronies and (minor) desynchronizes in actions, feelings, and sensibilities. Participating in this interpersonal system of regulation thus helps the child to learn to appreciate both their own and other's intentions and perspectives, developing more accurate theories of mind, an issue central to capacities for autonomous regulation.

Third and finally, participating in a relationship characterized by mutual responsivity seems to enhance internalization and self-regulation. Kochanska (1997), for example, showed in longitudinal work that mother–infant dyads that were higher on mutual responsivity when children were between 26 and 41 months, predicted greater child internalization of maternal values and rules. Moreover, earlier responsivity precluded the need for greater maternal controllingness later on, whereas mothers who had been less empathic and in less responsive dyads, were more likely to appeal to controlling behavioral and coercive strategies subsequently. Kochanska thus verified that a consequence of responsivity is a lessened need for parental power or coercion, and a greater eagerness on the part of the child to internalize as one's own behavioral regulations and values. Indeed, considerable evidence shows the inverse relationship between parental controllingness and children's readiness to internalize (Grolnick, 2003).

These experiences of interaction and of "being regulated" within the caregiver–child dyad thus influence from early on the child's developing the capacity for self-regulation. Yet, this kind of autonomy support and high quality of relatedness depend, in most instances, on a caregiver who has psychological resources of his/her own. Caregivers who have their own preoccupations or stress may not be available for this normal or "natural" dyadic dance. In a classic study of mother–infant interactions, Field (1987) found that mothers adjust their behavior to infants to provide adequate stimulation and arousal modulation. In an optimal interaction, mother's and infant's attention and affective behavior are synchronized. If, however, the mother is emotionally unavailable or unresponsive, as in the case of depressed mothers, the relationship would be asynchronous, and the child would be likely to experience disorganization and manifest disturbed state regulation. Field, Healy, Goldstein, and Guthertz (1990), in fact, found more negative affect and greater asynchrony between mood states in depressed mother–child dyads.

The principle that autonomy supportive caretaking environments facilitate a child's becoming more able to self-regulate emotion and behavior applies well beyond infancy. For instance, Calkins (1997) and Calkins and Johnson (1998) found that children of mothers who used high levels of negative control during free play spent more time orienting to a desired but forbidden stimulus. These children used less self-distraction and were less physiologically well regulated during a waiting situation relative to children of mothers who used less negative control. Further, mothers' use of positive guidance (akin to autonomy support) was associated with greater use of distraction and constructive coping in emotion inducing situations. Grolnick, Kurowski, McMenamy, Rivkin, and Bridges (1998) examined the strat-

egies mothers use to help their young children regulate distress. Children of mothers who maintained their active assistance beyond what the child needed were less able to regulate their distress when on their own. Deci, Driver, Hotchkiss, Robbins, and Wilson (1993) showed that children of mothers rated during dyadic play as more controlling than autonomy supportive were less likely persist at a task without her. Thus, although involvement is important, parents who do not allow their children opportunities to self-regulate appear to undermine children's self-regulatory capacities.

Beyond early childhood, the further development of autonomy remains linked with caregiver sensitivity and autonomy support. Numerous studies have shown that parents who are more controlling versus autonomy supportive have children who are less motivated to achieve, less securely attached, more likely to engage in risky behaviors, and less likely to experience well-being and mental health (for a review, see Ryan & Deci, 2003). It is important for our discussion of BPD that controlling environments also forestall the internalization and integration of social values and constraints and disrupt the capacity of the growing person to reflectively choose among alternatives. For example, Grolnick and Ryan (1989) interviewed mothers and fathers of children in Grades 4–6 regarding their parenting styles and strategies, in addition to surveying children and their teachers about the child's motivation and self-regulation. They found that more autonomy supportive parents had children who self-reported greater internalization of values for school and achievement. Teachers also rated children from more autonomy supportive homes as more self-motivated and as posing fewer behavioral problems. Autonomy support, that is, remains critical throughout childhood, as children move toward more advanced theories of mind, less egocentrism, and wider engagement in social networks and domains where self-regulation matters (Ryan, Deci, et al., in press).

Adolescence also appears to be a particularly critical time in the development of autonomy. As Ryan and Kuczkowski (1994) argued, adolescents typically acquire the cognitive skills to decenter in middle childhood, or grasp that there are multiple perspectives associated with social events. With this expansion in self-awareness and reflective capacity comes both increased egocentrism and concern with what others think. This can be a source of heteronomous regulation, relating to the well-known tendency of teenagers to conform to others' opinions or pressures. However, Ryan and Kuczkowski showed that these tendencies toward egocentrism and conformity persist longer among teens whose parents are more controlling and who foster insecure relationships. Similarly, Ryan and Lynch (1989) showed that teens of parents who are either controlling or rejecting tend to detach from them, and they are less likely to seek out or to internalize parental guidance. Accordingly, these teens are more prone to conformity and more at risk for problematic behaviors than teens from more autonomy supportive and loving homes. Studies in high schools in the United States and elsewhere also show that parental autonomy support is related to lower symptoms of depression and anxiety and a higher sense of self-worth and identity (e.g., Chirkov & Ryan, 2001).

In sum, as the development of self-organization proceeds in social contexts where children experience ongoing supports for autonomy and relatedness, they display increasing amounts of self-determination, appropriate to their developmental stage. Behaviors are undertaken with a sense of choice, for they emanate from the self in a harmonious fashion. When development does not proceed optimally, however, because of biological vulnerabilities or because the social context does not provide autonomy or relatedness supports, the integrative processes upon which self-regulation process will be impaired, resulting in disturbances of autonomy. This may involve blocking awareness of urges and developing rigid regulatory processes, or alternatively, displaying inadequate regulatory capacities and being governed by one's urges. In other words, when integration is impaired, people become either over- or undercontrolled, neither of which is adaptive, for both lack the experience of autonomy (Deci & Ryan, 2000). In the case of overcontrol, the development of self is undermined as people regulate

action through rigidly introjected values and controls, whereas in the case of under control internalization is forestalled, preventing the development of a well-anchored value system to organize and guide behavior (Ryan, Deci, et al., in press).

Borderline Disorders: Lack of a Stable Self

Although estimates of its prevalence vary (see Lenzenweger, Loranger, Korfine, & Neff, 1997), BPD is a salient concern in many clinical settings due to the personal resources demanded in its treatment (Linehan, 1993). According to *DSM-IV-R*, BPD represents an enduring pattern of experience and behavior that is deviant from one's culture, is pervasive and stable over time, and is associated with considerable distress and impairment. Reflecting this chronic impairment in regulation, comorbidity is more the rule than the exception. BPD is typically associated in adults with multiple concerns including drug and alcohol abuse, depression, anxiety, dissociation, and antisocial behaviors. In children the lability and dysregulation that characterize BPD are manifest in terms of both behavioral and mood disturbances, which are likely to be variously diagnosed and treated (Bemporad et al., 1982; Goldman et al., 1993). Herein our focus is on some of the clinically relevant features and etiological underpinnings of BPD specifically connected with autonomy and relatedness issues.

Etiology and clinical picture considered developmentally

BPD represents a prototypic example of structural damage to the self that has been associated with failures in autonomy support and relatedness of early caregivers. The core feature of BPD is a lack of a cohesive and stable sense of self. Among the central features associated with this lack of a consistent and organized self is emotional lability and self-esteem instability. Individuals with BPD show the externalizing attributes of impulsivity, along with some of the features of internalizing disorders such as susceptibility to depression, anxiety, and fragmentation in the face of self-esteem related losses (Gabbard, 2000). A central dynamic of borderline lability concerns anger, both directed toward self and others, which can result in destructive actions and magnify relationship instability and internal feelings of being overwhelmed and disintegrated. More generally, patients with BPD have difficulty differentiating internal needs from external reality, and are often very dependent on supports from others to maintain a sense of self. They lack sufficient internal controls to modulate anxiety, which can escalate to panic proportions, particularly when others are not available to contain and comfort them.

Another central feature of BPD is a lack of stable sense of identity and commitment, either to a line of action such as a vocation or to a committed relationship (Meissner, 1988). Patients with this disorder, however, may latch temporarily on to something or someone in an effort to derive a feeling of cohesion, but these choices are often inappropriate or destructive. Commitments are difficult because the individual with BPD lacks a stable cohesive self that can form the basis for sharing in committed relationships or endeavors.

BPD is also considered by many to be a "spectrum" disorder (Meissner, 1988), with presentations that vary from moderate mood and relationship instability to repeated parasuicidal crises and tumultuous and destructive interpersonal conflicts. Variations in severity can be related both to predisposing vulnerabilities and to the nature and chronicity of insults to autonomy and relatedness during development. In other words, the types of crises that befall those with BPD are often indicative of developmental fault lines concerning autonomy and relational deficits (Masterson, 1985).

It is noteworthy that patients with BPD frequently report being both controlled and helpless with respect to their behavior: they lack both autonomy and control (Ryan, Deci, & Grolnick, 1995). They often report feeling like a victim of circumstances without a sense of personal initiative or responsibility for the direction of their fate (Meissner, 1988). For example, an adolescent patient of the author's once reported that prior to self-mutilation he entered into a "lost" state, where the over-

whelming impulse to cut "came upon" him (conveying an impersonal perceived locus of causality), while at the same time he felt he could only obtain relief and release from dysphoric self-hate feelings by engaging in such acts (suggesting external causality). He did not experience autonomy or volition in these acts, but instead felt driven, desperate, and helpless. It is interesting that these self-destructive acts often followed events in which he experienced a sense of rejection or abandonment from a sometimes clinging and sometimes harshly critical parent.

Patients with BPD may feel empty and isolated (Westen, 1991), which is connected with the lack of feeling of autonomy and identity. Clearly, there is a diminution of the true self whereby the individual loses connection to his or her interests and feelings. Patients with BPD often report feelings of boredom and may engage in impulsive acts, such as substance abuse, careless spending, and binge eating, to counteract such feelings.

Considerable clinical literature and a growing body of empirical evidence implicate the early environment of the child in the emergence of BPD (Depue & Lenzenweger, 2001; Stone, 1990). As noted previously, the formation of a stable and cohesive sense of self depends on the integration of positive identifications in early life. Thus, it is not surprising that theories and research on BPD point to the importance of early family relations, specifically severely impoverished caregiving during the early years, and caregivers' difficulty allowing the child to move toward greater autonomy. That is, caregivers' failure to support or promote the child's autonomous functioning is presumed to set the stage for difficulties in developmental tasks such as affect modulation, reflective self-management, and identity formation.

The caregiving environment and BPD

As implied by our discussion of normal development, the growth of autonomy is dependent upon specific nutriments that include autonomy support or sensitivity, and availability or warm relational involvement. In contrast to these optimal circumstances, caregivers of individuals with BPD have been described as unavailable, inconsistent, and controlling (Bernheim, Rescorla, & Rocissano, 1999; Berzirganian, Cohen, & Brook, 1993). Zanarini and Frankenburg (1997) reported that patients with BPD generally viewed their primary maternal relationship as distant and uninvolved, as well as conflicted and controlling. Those with BPD also reported a significantly higher percentage of early caregiver separations and losses, highlighting issues of unavailability and inconsistency.

Linehan (1987) suggested that patients with BPD come from families that *invalidate* the affective experience of their children. Specifically, she argues that the private experiences of children are met with erratic, incongruent, or extreme responses. The child's experience is often trivialized, denied, or even punished. There is no tolerance for fears or anxieties in the children, and they do not experience soothing or comforting from the caregiver, whose own instability can also communicate the absence of an emotional safety net for the child's distress. Without such care, children cannot readily internalize the capacity to soothe themselves, resulting in difficulty regulating emotions and tolerating feelings of distress that could help to guide their actions.

Object relations theorists (Kernberg, 1967; Masterson, 1985) suggest that BPD has its roots in the mother–child relationship, particularly during the phase of separation individuation. Part of the phase involves an increasing assertion of self-direction and interests. In families of borderline individuals, the mother is not able to tolerate movement toward self-direction, as it brings up her own fears of abandonment. Consequently, she threatens to withdraw nurturance from the child if he or she acts as a separate individual. With respect to basic psychological needs, the child must therefore decide between autonomy and relatedness to the mother and, because of his or her helpless position in relation to the mother, the child gives up autonomy and the trajectory of true self (Miller, 1981). The connection to mother, however, is not experienced as true relatedness because it is untrustworthy and fraught with hostility. Given this level of conflict, there is no "good" object that can sup-

port the basic psychological needs underlying a cohesive sense of self. Moreover, this sets the stage for experiencing self-assertion as potentiating abandonment, which is commonly reported by therapists of those with BPD.

It is more telling that reports of sexual, emotional, and physical abuse are so common among persons with BPD that some consider them a regular antecedent (Westen, Lodolph, Misle, Ruffins, & Block, 1990; Zanarini, 1997). Herman, Perry, and van der Kolk (1989) reported that over 80% of the BPD patients they examined were physically or sexually abused or witnessed serious domestic violence. Gabbard (2000) suggests that in over 60% of patients with BPD childhood sexual abuse is an etiological factor. Benjamin (2003) also suggests that along with physical and sexual abuse, those developing BPD likely faced periods of abandonment, in which the child was left both vulnerable and without comfort. She submits that these experiences can precipitate or magnify the idea in a child that "she is bad" or unworthy. Moreover, they amplify fears of abandonment and aloneness. Whether unavailable or abusive, BPD seems associated with caregivers who could or were not able to provide mirroring and responsiveness needed for secure self-development, or protection from abuse. The high degree of trauma, especially in the form of sexual or physical abuse, among those with BPD deserves special attention. It seems clear that exposure to trauma produces an array of damaging outcomes, including distrust, insecurity, and dissociation. Moreover, trauma can exacerbate genetically based vulnerabilities, an issue of special pertinence to BPD where some evidence (to which we shall turn shortly) suggests a predisposition to emotional reactivity (Bleiberg, 2004). Trauma also creates disturbances in physiologic and neuroendocrine regulation associated with ongoing deficits in emotional and social competencies (Repetti, Taylor, & Seeman, 2002; Yehuda, 1998). Perry, Pollard, Blakley, Baker, and Vigilante (1996) presented a specific model in which the trauma suffered by the child creates a state of hyperarousal that is chronically reactivated by environmental cues. Such hyperarousal triggers either the flight or fight response or dissociative mechanisms that inhibit more central executive and reflective functions. Because this sensitization process occurs during early childhood and thus formative years for the brain, it can ultimately result in malorganization and compromised function in brain-mediated functions such as humor, empathy, reflectiveness, and affect regulation, all of which require the involvement of integrative cortical activity. As Perry (1997) put it, the child with BPD is deprived of experiences which "feed and grow" the cortical functions and instead has adopted a propensity to respond in reactive, nonself-mediated ways to threat-related cues. Such models of how early deprivations of responsive and autonomy supportive caregiving can alter brain structure and create the trait like impulsivity and affective dysregulation characteristic of BPD fit well within Greenough and Black's (1992) concept of *experience-dependent development*.

Unfortunately, all too often these deficiencies in nurturance can be traced to caregivers' own troubled history or experience of trauma, which have rendered them too preoccupied, disturbed, or needy to be optimally empathic and nurturing. For example, Eurelings–Bontekoe, Verschuur, and Schreuder (2003) reported a much higher probability of BPD in children whose parents experienced World War II related posttraumatic stress disorder compared with a control group. Such evidence suggests a transgenerational transmission effect, in which trauma emotionally incapacitates a caregiver, who then either fails to nurture or, in turn, traumatizes offspring of his or her own.

In sum, centrally implicated in the etiology of BPD are deficient supports for autonomy and relatedness. Neglectful or invalidating caregivers (those unable to appreciate or respect the child's experience) fail to help the child differentiate or stay in touch with inner feelings and emotions and fail to modulate intense experiences to facilitate more regulated action. What is worse is that traumatic handling by caregivers, which is clearly a violation of both autonomy and security in relationships, leads to additional vulnerabilities to dysregulation. A result is impaired capacities to anticipate or to become aware or mindful of

inner needs, a requisite capacity for healthy self-regulation. Instead, the child is left with feelings of helplessness or reactivity and a need for others to fill in, direct, or modulate experience. The impaired capacity to be alone so often salient in persons with BPD reflects this lack of ability to self-regulate arousal or emotions, as does the self-reported experience of persons with BPD of not feeling in volitional control when activated. Finally, the high risk of persons with BPD for drug and alcohol abuse points to attempts to self-medicate and externally control arousal in ways that have maladaptive consequences.

This evidence points also underscores the inexorable connection between autonomy and relatedness in development. Without a sensitive caring relationship, in which needs are acknowledged and responded to, autonomy cannot take root and develop (Ryan, 1993). In the context of relationships that are depriving or controlling, children are less able to participate in the mutuality of a relationship, and in turn, to learn how to mentalize (Fonagy & Target, 1997) or represent their own and others needs feelings and perspectives. Indeed, they may defensively turn away from awareness of others' experience, and from dwelling in their own or others' inner states. Moreover, as these reflective functions subserving autonomy fail to develop, children are less likely to find and connect with new responsive social partners, and they may even incite hostile, rejecting, or avoidant behaviors in others. Thus, impairment in autonomy disrupts the development of relatedness, just as deficient or impoverished relationships impair autonomy.

Cascading behavioral effects of this disruption through the course of development have not been thoroughly researched, but the life histories beyond childhood of those developing BPD are telling (Gabbard, 2000). As the child increasingly moves into extrafamilial environments they carry with them the now "traitlike" (Perry, 1997) tendencies toward ambivalence in social interactions and often superficial, transient, or indiscriminant types of socialiability. Inability to read others, or connect with feelings, can lead to isolation, or in other cases serial tumultuous ties. Moreover, the absence of secure ties to parents forestalls internalization (Ryan & Lynch, 1989) and contributes to the potential for peer conformity and influence as well as antisocial behaviors. Finally, tendencies toward dysphoria, including feelings of emptiness, rage, and depression, can contribute to maladaptive patterns of withdrawal, drug and alcohol abuse, or destructive relationships.

The child's contribution

As pointed out in the discussion of normal autonomy development, whether or not an environment is autonomy supportive, controlling, or neglectful is a function not only of caregiver dispositions, but also of what the child brings to the relationship. Whereas an "easy" child may reduce caregiver burden and elicit positive responses, a "difficult" child can pull for control, or provide a level of stress or turmoil that can disorganize a vulnerable parent or caregiver (Grolnick, 2003). There is a good deal of evidence, both clinically and empirically derived, that children who develop BPD bring a considerable amount to the table (Depue & Lenzenweger, 2001).

Cloninger, Svrakic, and Przybeck (1993) introduced a diathesis stress model of behavioral disorders that they applied to BPD. They specifically argued that patients with BPD were genetically prone to high novelty seeking and need for stimulation, as well as high reactivity or anxiety proneness. This temperamental configuration sets the stage for problems with emotional regulation, particularly in context in which caregivers may not sufficiently respond to or modulate the child's emotional reactions. This anxious activity on the part of the child may also prompt distress in caregivers, further compromising their functioning.

Other investigators have suggested that those with BPD may suffer from serotonergic dysfunction (e.g., Figueroa & Silk, 1997). Insofar as serotonin plays a critical role in behavioral inhibition, chronically decreased serotonergic activity may relate to the problems with impulse control characteristic of those with BPD. Again, weakness in inhibition may pull for negative and controlling responses, especially in vulnerable caregivers. The effects of maltreatment or trauma may

aggravate this scenario, as trauma, which can alter cortisol and catecholamine levels, can lead to hyperreactivity and chronically elevated stress, and this no doubt relates to the often intolerable background dysphoria and emptiness those with BPD can report.

Depue and Lenzenweger (2001) and Posner et al. (2002) have argued that underlying the poor ability of BPD patients to regulate negative emotions are information processing deficits, ones that specifically concern effortful control of attention. Posner et al. showed that this is especially apparent in tasks involving conflicts between incongruent signals, where performance problems were heightened in BPD patients even when compared with temperament-matched controls. They speculated that the poor socialization conditions faced by patients with BPD may interact with this deficiency in effortful control to produce other symptoms. Similarly, Lenzenweger, Clarkin, Fertuck, and Kernberg (2004) showed, in line with the Depue and Lenzenweger's (2001) model, that relative to controls, BPD patients had diminished capacities in controlled or effortful processing. These models suggest that, particularly under conditions of stress, those with BPD may have more difficulty allocating processing capacity, a finding congruent with the often-noted impulsivity and lack of cognitive control over behavior these patients exhibit.

In sum, difficulties in both temperament and capacities for attention and affective regulation have been implicated as diatheses that potentiate chronically impoverished coping with stress, particularly in the face of repeated trauma. Moreover, temperament difficulties can also contribute to dispositional characteristics and reactivity tendencies that further strain the ability of caregivers to be empathic and need supportive. In other words, child vulnerabilities and the biologic processes further set in motion by trauma can interact with caregiver vulnerabilities and deficits in fostering the impairments of autonomy and self-regulation so central to the clinical presentation of those with BPD.

Implications for Treatment of BPD

Recognition of the deficits in both relatedness and autonomy and their role in the development of BPD is related to specific strategies that commonly characterize the treatment of those beset with BPD. That is, current treatments attempt to address the disturbance of autonomy and self-regulation through both attending to the interpersonal atmosphere or climate of treatment and through specific skills related to deficits in self-regulation. In the following text we review some of these common elements and their relations to autonomy and its enhancement.

Validation and acceptance

Current treatments and psychotherapies for BPD allow the patient to talk about present concerns and past experiences in the context of an empathic, accepting and nonjudgmental relationship. This attribute of a climate of acceptance and support is endorsed by both dynamic and cognitive–behavioral approaches alike (e.g., Linehan, 1993; Meissner, 1988). The patient is encouraged to talk about feelings, and to feel understood, rather than to discharge them in self-defeating ways.

In the context of normal development, validation and acceptance of one's experience support the development of self-awareness, helping the child to clarify his/her phenomenal world, and to better recognize and manage needs, motives, and impulses (Bleiberg, 2004; Bronson, 2000). Empathy and interpersonal acceptance of experience thus make a structural contribution to the developing organization of self, and this in part explains the structural deficits in personality functioning experienced by those with BPD. Second, validation and acceptance have intrinsic value, satisfying a very basic need to feel connectedness and belonging, and supporting a sense of self as worthy and loved. Validation and acceptance thus directly satisfy needs for relatedness and contribute to well-being and a more positive view of self and others.

Therapeutic interventions focused on validating and accepting the patient's experience attempt to ameliorate both structural deficits in functioning, and negative views of self and others. Validation promotes awareness through clarifying experience and making it more accessible; and it promotes self-esteem by pro-

viding feelings of safety, caring, and understanding. With this increased awareness and capacity for self-observation and sense of self-confirmation, a patient with BPD may be better able to alter maladaptive patterns of coping set earlier in life.

Linehan (1993) describes three aspects to validation in her dialectical behavior therapy (DBT) for persons with BPD. First, the therapist actively and accurately observes what the patient does, feels, and thinks, without bringing in prejudices or biases from elsewhere. Second, the therapist reflects the patient's experience in a way that is fundamentally nonjudgmental and noncontrolling. This helps the person with BPD to feel "real," and it can be a calming and soothing support in times of change. Third, the therapist "directly validates," by understanding why and how the patient's behaviors and reactions often make sense in the context of their own experience. The therapist looks first to comprehending the appropriateness or reasonableness of actions before considering their costs or maladaptive aspects. This is critical, argues Linehan, because it is the basis on which the patient can begin to internalize a noncritical and self-validating stance. Together, these validating activities then support change by fostering more self-trust and self-acceptance.

Beck and Freeman (1990) suggest that the person with BPD suffers from "early maladaptive schemas" that represent core beliefs that structure behavior and experience. These include the ideas that (a) the world is malevolent and dangerous, (b) I am powerless and vulnerable, and (c) I am inherently unacceptable. Because Beck's cognitive therapy approach views these core beliefs as a basis for maladaptation, these beliefs are a focus for change. By providing validation of feelings, and at the same time debunking self-invalidating statements and beliefs, Beck's approach attempts to moderate and reconfigure these early maladaptive schemas, setting the stage for more adaptive functioning.

Meissner (1988) states similar principles in his psychoanalytic approach to the treatment of persons with BPD. He extends validation and acceptance even to events where the therapist is seen as deficient or abandoning. Rather than disputing such feelings, Meissner states that the "patient's feelings are validated; he feels understood and accepted in the face of his outrage" (1988, p. 171). As Meissner emphasizes, it is the empathy with and acceptance of the patient's experience as meaningful that facilitates the therapeutic alliance, which "is not something that is inherently only in the patient; rather it involves a process of interaction to which both patient and therapist contribute" (1988, p. 140). Maintaining an autonomy supportive attitude as a therapist, particularly in the context of the patient's provocation or distress, is no small matter.

Cultivating mindfulness

A second common goal of therapy for those with BPD is increasing the patients capacity for reflective self-awareness, and the greater impulse control and tolerance of distress that is associated with this. This is frequently addressed though fostering of mindfulness. *Mindfulness*, which is most simply defined as the awareness of what is actually occurring in one's internal and external environment, is a prerequisite to making adaptive choices and to exercising volition (Brown & Ryan, 2003). In mindfulness training a person learns to be an observer of the flow of impulses, emotions, and events, without allowing them to compel actions that are not reflectively endorsed. Brown and Ryan (2003, 2004) have, in fact, empirically linked mindfulness with autonomous regulation. They suggest that mindfulness describes the condition in which one is attentive to what is occurring, and the consequences of actions, therefore providing a basis for more informed, self-endorsed actions. Mindfulness also places an appropriate distance between the self as observer and arising impulses and possibilities, giving a person more perspective for making choices and considering meanings.

Accordingly, mindfulness training is being increasingly incorporated into treatments for BPD, as it can specifically help the patient to "hold" distress, exist apart from impulses, and reflectively reconsider options. For example, in Linehan's (1993) DBT approach concepts such as "just notice the experience" and "step-

ping aside" and nonjudgmentally observing arising impulses and feelings, are advocated. These compliment the therapists ongoing validation and acceptance of the patient's experience, but at the same time they also suggest that feelings and impulses do not have to overtake the self or drive action. Mindfulness-based interventions are also becoming increasingly common in cognitive behavior therapy and dynamically based treatments of personality disorders (e.g., Segal, Williams, & Teasdale, 2002).

Skills training

Beyond validation, acceptance, and awareness, many approaches to BPD treatment advocate *skills training* for dealing with the patient's vulnerabilities to dysregulation, including their mood lability, temperamental issues, impulse problems, and needs for emotional reliance. Skills in focus typically concern self-monitoring, problem solving, goal setting and self-assertion, among others. Given that stress can more readily debilitate autonomous functioning in those with BPD, acquiring capacities to tolerate stress, insult, and/or isolation, from relaxation to problem solving can be effective. In addition, because developmental deficits leave gaps in skills to assert one's own volition, as well as connect with others in positive ways, training in effective ways of getting these needs met has been advocated (e.g., Beck & Freeman, 1990; Linehan, 1993).

There is an interesting issue regarding how features of therapy such as validation, awareness enhancement, and behavioral skills address borderline pathology. Skills, such as learning to monitor feelings and impulses, and to cognitively modulate and reflectively select among alternatives, are components of regulation that many people have learned "naturally" (meaning without their acquisition being an explicit goal) in "average expectable" caretaking environments. Some therapies thus assume that, by providing the right conditions of acceptance and validation, developmental progress can resume where it left off (presumably in early childhood). "When the patient feels the analyst understands, respects and is concerned with his archaic longings, rooted in a vulnerable and arrested self, the resumption of an interrupted developmental process becomes possible" (Brandchaft & Stolorow, 1994, p. 108).

The skills-building approach, however, does not rest on that assumption. Instead, its beneficial effects may not derive from "filling in" developmental deficits and creating new self-structures, but rather, by directly ameliorating some stress and anxiety through the learning of new functions taught in a new age-appropriate manner (Eagle, 1998). That is, therapy may not function to "pick up" development where it left off, but it may address structural deficits by adding appropriate tools for coping in the here and now, even if those tools are transmitted and internalized in a way that is different from how they might have been in normal development.

In any case, a collaborative autonomy supportive approach to skills training is advocated. As Linehan (1993) points out, skill training can, if not handled well, feel both like a criticism and invalidation of the person with BPD's attempts at coping. Accordingly, a mutual effort in identifying and enhancing skills is useful. Beck and Freeman (1990) similarly advocate a collaborative relationship in the skills area. As they point out, the sensitivity of the person with BPD to being controlled makes it easy for skills training to become a power struggle. By being collaborative and supporting the patient's active involvement in developing agendas in treatment, Beck and Freeman claim power struggles can be minimized.

These admonitions of course fit well within SDT's position (Deci & Ryan, 1985) that autonomy support in the context of therapy facilitates internalization and adherence. A good example of this comes from a recent study of opiate addicts in the context of a methadone maintenance program (Zeldman, Ryan, & Ficella, 2004). Zeldman et al. found that patients, many of whom had Axis II comorbidity, who experienced their program therapists as more autonomy supportive were more likely to express volition for treatment, and were also more likely to adhere to the therapeutic regimen, as evidenced both by their self-reports, and chemically verified testing for

relapse. Indeed, an increasing number of studies are revealing how autonomy support is critical to establishing both a therapeutic alliance, and in facilitating internalization (and, therefore, the maintenance and transfer) of treatment gains (Markland, Ryan, Tobin & Rollnick, in press).

The contextual nature of security and self-regulation: Implications for BPD

With its emphasis on social influences, SDT research suggests that a person is more likely to connect with, internalize, and integrate to the self, information, values and practices acquired in the context of autonomy supportive relationships. Recently there has been considerable research on "within person" differences based on SDT (Brown & Ryan, 2004), and it has revealed the robustness of variations within person of variables such as felt attachment, emotional regulation, manifest traits, and well-being. Even controlling for individual differences, the data shows that, when comparing within a relational network, a person feels most securely attached to those social partners who are most autonomy supportive (La Guardia, Ryan, Couchman, & Deci, 2000). Similarly, at a within-person level, emotional reliance (Ryan, La Guardia, Solky–Butzel, Chirkov, & Kim, 2005), emotional regulation (La Guardia & Ryan, 2005), and well-being (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000) also vary robustly with perceived autonomy support. Finally, Lynch and Ryan (2004) showed in varied cultural samples that a person is less neurotic, more open, more agreeable, more extraverted and more conscientious relative to their own baseline when they are with a more autonomy supportive partner.

This evidence suggests that even a person who is operating out of a developmental deficit in self-organization is likely to operate at his or her own highest levels of functioning when connected with an autonomy supportive partner. The fact that within-person differences from partner to partner and setting to setting are not only significant, but well outstrip between person differences on most adjustment variables, suggests that by providing a need supportive environment, therapists can open up new possibilities to people with BPD. That is, therapists are less likely to elicit or engage the person's less mature forms of regulation to the extent they can remain attuned to and respectful of the needs of the self, even those that seem more archaic or primitive. Moreover, in a context of autonomy support and appreciation for the patient's perspective, understanding can develop, as well as a new secure base in which internalization can occur (Brandchaft & Stolorow, 1994). Thus, from an SDT view, whatever the content and strategy of therapy for BPD, it should be conducted in an atmosphere of autonomy support.

Summary

BPD is discussed as a disorder of autonomy. Evidence suggests that deficits in autonomous regulation in those with BPD stem from caregiving environments that were neither empathic nor responsive and, for many patients, also did not protect them from maltreatment. These early environments were thwarting both needs for autonomy and needs for relatedness and reflect not only caregiver deficiencies but also child risk factors that tend to elicit less nurturing responses from others.

The impact of these unsupportive environments is that the child does not learn to recognize and accept inner states and is less able to participate in the feelings and intentions of others. These deficits in reflective function and awareness accompany feelings of relational insecurity, because such unresponsive caregiving also does not provide comfort or ameliorate distress. High levels of distress and, in many cases, the direct experience of trauma, further disrupt biological capacities to cope with arousal and emotions, aggravating the growing child's regulatory difficulties. Thus, social–contextual deficiencies in autonomy support and relatedness create both developmental deficits, as well as increase physiologic vulnerability, setting the stage for the unregulated, labile presentation of BPD.

Treatments for BPD focus on several elements of the disorder that are implicated by this etiological portrait. Specifically, effective therapies focus on validation and acceptance

of feelings, cultivating mindfulness, or self-reflective capacities regarding feelings and impulses, and teaching skills that aid regulation and break past patterns that have previously compromised adaptation. It is argued that, given the fragility of self-acceptance and the difficulties of internalization faced by persons with BPD, the importance of an autonomy supportive and collaborative atmosphere is paramount. As recent SDT research (e.g., La Guardia et al., 2000; Ryan, La Guardia, et al., 2005) highlights, people are quite sensitive at a "within person" level to variations in responsive, autonomy supportive relationships. Thus, by providing guidance for change in the context of autonomy support, therapists can maximally facilitate internalization and emotional adjustment in persons with this formidable personality disorder.

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