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# Borderline Personality Disorder and Loneliness: Broadening the Scope of Treatment for Social Rehabilitation

Sam A. Mermin, BA, Georgia Steigerwald, BA, and Lois W. Choi-Kain, MD, MEd, DFAPA

**Abstract:** Borderline personality disorder (BPD) has been described as a condition of intolerance of aloneness. This characteristic drives distinguishing criteria, such as frantic efforts to avoid abandonment. Both BPD and loneliness are linked with elevated mortality risk and multiple negative health outcomes. Psychodynamic theories of BPD emphasize fundamental impairment in attachment and interpersonal functioning. Empirical research demonstrates an association between BPD diagnosis and increased loneliness. Individuals with BPD experience higher levels of loneliness than the general population, and their social networks are systematically smaller, less diverse, and less satisfying. Differences in the subjective experience of loneliness persist when controlling for these relevant social network features, indicating that people with BPD experience more loneliness than others in the same objective social circumstances. According to patients with BPD, increased social connection is often a primary treatment goal and marker of satisfying recovery. There are, however, few evidence-based approaches that primarily target loneliness and building life structures that support durable connections with others. Therefore, loneliness persists as an intractable problem, often failing to remit alongside other symptoms, and few resources are routinely implemented to address this problem. In this article, we argue that loneliness is central to the symptomatic oscillations and subjective experiences of many patients with BPD. We propose that treatment extend beyond the overemphasized therapeutic alliance relationship to also promote socialization and group and vocational settings to enhance patients' social networks. Building larger social networks that rely less on exclusive caregiving and/or romantic relationships and more on role-bound identity building and community relationships would more directly target long-term identity diffusion and relational instability. Such interventions can harness nonclinical community resources, such as group treatment, vocational supports, and peer supports.

**Keywords:** borderline personality disorder, interpersonal hypersensitivity, loneliness, peer supports, recovery, vocational supports

## INTRODUCTION

Borderline personality disorder (BPD) is a prevalent, disabling, and sometimes fatal condition characterized by intense fear of abandonment and hypersensitivity to interpersonal stressors. It is also characterized by a distinctive intolerance of aloneness, which underlies both frantic efforts to avoid abandonment and unstable relationship criteria diagnostic of the disorder. Gunderson[1] argues that intolerance of aloneness is the central dysfunction of BPD, and one of the most difficult and essential dynamics to be managed in treatment. This argument draws on Adler and Buie's[2] theory that the reassurance-seeking tendencies of the condition stem from struggles to mentally represent caretakers who are not physically present. Therefore, patients with BPD require more frequent demonstrations of availability and care. Clinical theory and experience describe characteristic patterns of interpersonal BPD functioning in which individuals develop intense and exclusive relationships that lead to conflict and ruptures, followed by feelings of aloneness and despair.[3] Chronic emptiness and disconnectedness from self and others are associated with decreased remission rates,[4] and they often fail to improve when behavioral symptoms do.[5,6] Even when symptomatically recovered, individuals with BPD often remain socially isolated.[7-9]

Interpersonal difficulties and intolerance of aloneness are understood to be common and salient aspects of living with

**From** McLean Hospital (Mr. Mermin and Dr. Choi-Kain) Belmont, MA; Harvard College (Ms. Steigerwald); Harvard Medical School (Dr. Choi-Kain).

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**Correspondence:** Lois Wonsun Choi-Kain, MD, MEd, DFAPA, McLean Hospital, 115 Mill Street, Belmont, MA 02478. Email: lchoikain@mgb.org



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BPD. It is rare, however, that the construct of loneliness is explicitly investigated in the literature, despite gaining recent attention as an important topic across public health.[10] Loneliness, defined as the subjective experience of insufficient social connection,[11,12] relates to but is not equivalent to a person's objective degree of social isolation.[13,14] In this article, we outline how loneliness is central to living with BPD, and a key driver of ongoing vulnerability to poor mental and physical health. Therefore, we argue for the necessity of more directly addressing loneliness in BPD treatment and case management. We highlight the extent to which BPD and loneliness co-occur, and overlap in their causes, effects, and interactions. Ultimately, we propose increased utilization, innovation, and testing of interventions that directly or indirectly target loneliness and social networks in BPD treatment. While significant research is required to better understand optimal interventions for reducing loneliness, clinicians and health systems can use existing psychosocial tools as part of a broader approach to help people with BPD feel more connected and experience functional recovery and flourishing.

## THE EMPIRICAL CONNECTION BETWEEN BPD AND LONELINESS

Those with BPD are lonelier than others. In research, they consistently report higher levels of loneliness than those without the disorder.[15,16] A recent systematic review of over 70 studies[17] determined that loneliness and dissatisfaction with relationships are generally elevated in individuals with personality disorders, specifically in people with BPD, compared to the general population. In addition to reporting greater loneliness, multiple studies have found that people with BPD have smaller, less diverse social networks,[15,16] and lower social and global functioning[15] than healthy control subjects.

In addition, people with BPD exhibit higher variability in their support and satisfaction ratings across relationships within their social networks; they also report more relational ruptures.[18,19] Social networks of those with BPD include more intense and exclusive relationships, such as romantic partners and therapists, and fewer acquaintances, than control subjects.[18,19] Thus, those with BPD have fewer ties concentrated in more intense relationships, which may increase pressure on those individuals for support and interpersonal needs.

While these findings illustrate a clear systematic difference in the social networks of people with BPD, social network features do not entirely explain the differences in loneliness between people with BPD and healthy comparison subjects. Loneliness scores still differ when controlling for social network features and social functioning.[15] While defining interpersonal symptoms of BPD may naturally disrupt social functioning, limiting social networks, the degree of loneliness reported is not explained by social environment alone.

Genetics influence development of both BPD and loneliness. Large studies[20-22] using twin designs and genomic analyses have shown significant overlap in the genetic causes of the two conditions. Loneliness often persists when clinical symptoms remit,[5,9,23,24] indicating that distress as a response to aloneness is core to the disorder. These studies suggest the shared genetic contributors to BPD and loneliness are related to core Criterion A features of all personality disorders. Thus, loneliness is a problem of self-functioning and functioning relating to others.[25]

## HEALTH EFFECTS OF LONELINESS

Loneliness is not just psychologically unhealthy. It is a major drain on physical health.[26-29] The estimated effects of loneliness on mortality are comparable to smoking up to 15 cigarettes per day.[30] Because people with BPD tend to have unstable social support networks, they face increased likelihood of many medical ailments associated with social isolation. Cardiovascular disease, hypertension, gastrointestinal disease, arthritis, chronic fatigue, back pain, and other health conditions are associated with BPD.[31-33] Despite this knowledge, there is limited research examining the possible role of loneliness as a moderating factor influencing poor health outcomes in BPD.

Social support is a known protective factor against stress. While the body's stress response system provides essential short-term mobilization for immediate threat response, chronic activation can be harmful to long-term health. Such activation diverts energy from necessary processes, like immune functioning, and places excessive strain on the systems being activated.[34,35] Individuals consistently exposed to stress can develop ailments, including cardiovascular disease, hypertension, and depression.[36,37] Social support has been shown to reduce stress responses in both naturalistic and laboratory studies,[38] with effects observed across varying systems, including cardiovascular, neuroendocrine, and immune functioning.[39] For some, an acute feeling of loneliness can be a stressor unto itself—a threat to a basic need (social connection) necessary for survival. Multiple studies in both humans and animals demonstrate an association between significant early-life neglect and a dysregulated physiological stress response system that can become either hyper- or hypoactive.[40]

BPD is associated with increased exposure and reduced resilience to stressors, partially due to the absence of a stable interpersonal support system combined with a genetic association between the diagnosis and loneliness. Having an established BPD diagnosis is also associated with increased likelihood of negative/stressful life events, such as serious accidents, death of close family members, and violent crime victimization.[41] Studies that longitudinally examine the causes of such stressful events, however, also show that antagonism and disinhibition —BPD traits—predict these events more strongly than stressful events predict the severity of BPD symptoms.[42-44] The authors of these studies argue that BPD is a disorder of stress reactivity and stress generation. Biological vulnerability to stress sensitivity is common among people with BPD.[45,46] It is even predictive of whether life events lead to the most severe symptoms of the disorder.[47]

These stress-reactivity and stress-generation tendencies influence a belief that people with BPD cannot or should not work. We argue against this assumption. A vicious cycle of

pathogenesis begins early in development. Prospective longitudinal studies show that young people with endowments like emotional reactivity and impulsivity are at risk for social adversity, such as harsh parenting and bullying.[48,49] Before adulthood, those who have a higher burden of BPD symptoms tend to remain at this elevated symptom burden,[50] making it more difficult to behave in school and perform well academically. The increase in academic and disciplinary problems makes it more difficult to stay in school, where these individuals can develop social skills in an aim- or activity-oriented way. Having difficulty adapting to the classroom, in both social and academic demands at school, further marginalizes those with BPD and isolates them from their peers. Marginalization continues throughout development, with increased academic and probationary problems[51,52] and lower likelihood of employment than people with other psychiatric conditions.[53] This trend toward greater marginalization and segregation from mainstream peers, truly pushing individuals with BPD to the borderlines of society, contributes to even greater challenges. They struggle to develop adaptive functioning, learning, and working skills, as well as forge greater social connection via role-bound opportunities in academic, vocational, extracurricular, and social contexts. Given the empirical and theoretical associations between BPD and loneliness, their shared genetic risks, the general health effects of loneliness, particularly in BPD, and the further segregation of those with increased symptoms early on, targeting loneliness as a general health intervention for those with BPD is critical.

## HOW CURRENT BPD INTERVENTIONS ADDRESS LONELINESS

While several psychotherapies are effective in treating BPD, the psychosocial outcomes of these interventions, such as changes in loneliness, are less robust than psychotherapeutic effects on other BPD symptoms. A meta-analysis of BPD psychotherapeutic intervention trials concluded that evidence for effects on interpersonal functioning was limited.[23] Follow-up results from one of the largest randomized controlled trials in BPD treatment literature, comparing dialectical behavior therapy to general psychiatric management (GPM),[24,9] showed that symptomatic remission is more common than significant improvement in functional outcomes. In this trial, patients in both groups showed symptom improvement on BPD measures such as suicide attempts, nonsuicidal self-injury, depression, and overall BPD severity, and gains maintained over the two-year follow-up period.[9] The overall level of functional impairment in the sample, however, remained high. The percentage of participants across the two groups who were not working or attending school decreased from the baseline rate of 60.3% but remained over 50%. Furthermore, the percentage of participants receiving psychiatric disability was nearly unchanged from the beginning of the first trial to the two-year follow-up point.

Another study by Bohus and colleagues[5] indicated that loneliness was among the Borderline Symptom List scales on which patients did not display improvement over a 12-week period of dialectical behavioral therapy. Similarly, in longitudinal studies, those whose symptoms improve often do not see similar gains in functional outcomes like employment.[8,54] Zanarini and colleagues[8] explain that the gap between symptom remission and functional improvement identified in their study may be due to insufficient treatment focus on psychosocial functioning. The combination of a limited social support network and hypersensitivity to loneliness may represent a core component of this more general dysfunction. One analysis indicated that perceived social support mediates the relationship between pathological personality traits and functional impairment.[55]

Theoretically, major psychodynamic approaches, such as mentalization-based treatment (MBT)[56] and transference-focused psychotherapy (TFP),[57] extend Adler and Buie's[2] initial formulation that BPD stems from difficulty evoking soothing mental representations of others when facing fears and stressors alone. MBT conceptualizes BPD symptoms as reflections of unstable mentalization, defined as the capacity to understand actions of oneself and others in terms of internal motivators that are opaque and difficult to know with certainty. MBT specifies that mentalization is most destabilized when overstimulated by a hyperactivated attachment system. As a result, the individual needs the support of others but simultaneously fears them. Thus, MBT interventions aim to modulate attachment activation to stabilize social cognitive capacities. Additionally, this approach works with individuals to slow down, focus, and reappraise interpretations of their interactions with others, with the goal of developing reasonable degrees of certainty and accuracy. This process can motivate more prosocial behaviors and fewer behaviors that are bound to rupture relationships.

According to TFP, people with borderline personality functioning develop maladaptive associations between specific relationship dynamics and affective states. Such associations lead to an inflexible and/or split interaction style in which the person fluctuates between idealized caregiving dynamics and negligent, hostile, and persecutory dynamics. This ultimately results in unstable, discontinuous, and often polarized perceptions of self and others. Like MBT, TFP aims to foster a more realistic understanding of oneself and others. TFP, however, does so by clarifying the in-the-moment split object representations playing out in social interactions, including in the therapy itself. It fosters synthesis of seemingly contradictory elements into a more holistic and realistic understanding of relationships. Both psychotherapies focus on enhancing more accurate and mature social cognition and insight, rather than on social behaviors themselves. In these models, social behaviors are motivated by impoverished/distorted, black-and-white understandings of oneself in relation to others.

Within the GPM model, a more simplified case management approach, Gunderson[1] and others have argued that patients with BPD are defined by having an "intolerance of aloneness," which drives dependence and interpersonal hypersensitivity. When those who are interpersonally hypersensitive are also dependent on close relationships, symptomatic

destabilization characteristic of the diagnosis continues to recur. McMain and colleagues[9] demonstrated that DBT was not superior to GPM[58,24] in multiple clinical outcomes, including self-destructive behaviors, anger, interpersonal functioning, depression, anxiety, and symptom distress at the end of treatment and in two-year follow-up. In contrast to DBT, where emotional dysregulation and skills deficits explain the broad BPD symptoms, in GPM, hypersensitivity to interpersonal stressors is the core dysfunction addressed in treatment. In addition to providing psychoeducation to help people with BPD more realistically understand their social interactions, GPM heavily emphasizes functional rehabilitation. By encouraging patients to work and take on other forms of responsibility, this approach helps balance patients' social networks by fortifying low-stakes relationships. GPM is structured by role-bound, scheduled, and activity-directed interactions, which facilitate development of self-esteem and identity.[3] In addition to expanding networks and reducing the extent of individual ruptures, these low-stakes relationships may represent an easier context for social learning than attachment interactions that involve greater vulnerability. Perhaps most importantly, GPM encourages interaction in structured, predictable, and role-defined ways, potentially enabling individuals to manage themselves more effectively. This process increases self-esteem and social capital, helping those with BPD become more appealing, less dependent, and less destructive in their relationships.

## MUTUALLY REINFORCING CYCLES OF LONELINESS AND BPD IN THE GPM MODEL OF TREATMENT

Development and maintenance of BPD and loneliness are cyclical, self-reinforcing, and significantly overlapping. Gunderson's interpersonal hypersensitivity model (IHS),[58] shown in Figure 1, describes a common pattern. A patient with BPD develops a close, dependent, and often exclusive relationship when in an ideally connected state. In a supportive relationship, those with BPD may be optimally collaborative and open to direction, but dependent and vigilant to abandonment cues. When usual misalignment or disappointment occurs, those with BPD perceive threat to the relationship and forecast being on their own. In turn, they transition to a threatened state, in which hyperarousal triggers fight (aggressive) or flight (avoidant) reactions. These self-harming, angry, or recoiling responses paradoxically elicit withdrawal or rejection by others, who are often confused, irritated, or overwhelmed by these reactions. In the ensuing alone state, the patient can become unanchored from reality (e.g., from the consequences of their actions, bodily experiences, and the likely motives of others) and become difficult for clinicians, friends, or family members to reach. Collaborative engagement is more difficult at this stage, and unilateral intervention is common due to lack of agency and/or self-control associated with this impulsive, dissociated, and often paranoid state. The person with BPD then shifts to a state of despair. They are still alone and disconnected and, in some cases, ashamed or self-hating following the rupture. Many only feel the desire to live if saved, but otherwise would rather not be alive. This is often when extreme hopelessness and suicidality occur. Common intervention, such as hospitalization or police involvement, often follows at this point. This may temper the situation, stabilizing patients temporarily via connection with others, but this cycle inevitably repeats itself without more focused attention to these oscillations in treatment.

The IHS model centralizes intolerance of aloneness as a key destabilizing factor. Reliance on exclusive dependent relationships points to a desire for such relationships to satisfy need for connection in a secure and all-encompassing manner. Maintaining connection in important relationships generates ingratiating and preoccupied reassurance-seeking tendencies. But these connections remain fragile and often unrealistic and unsustainable. Invariably conflicts, disappointments, disagreements, and rejections cause those with intolerance of aloneness to feel more threatened. People with BPD become angrily devaluing

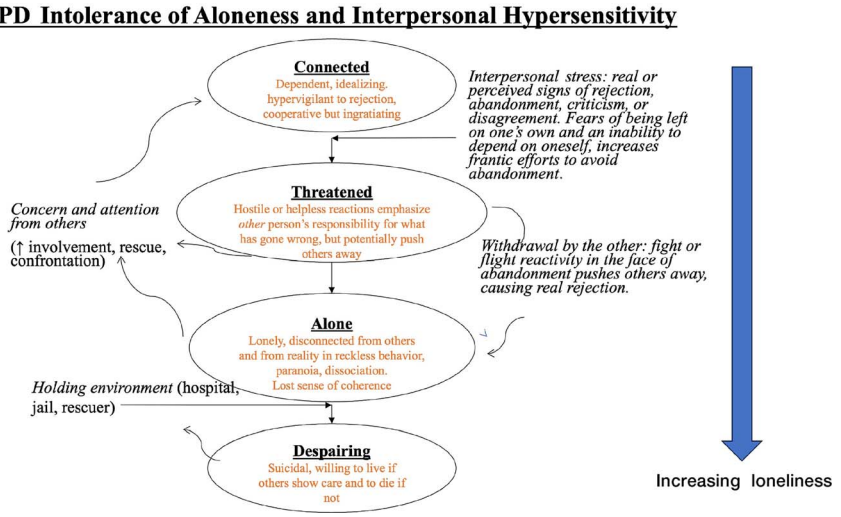


**Figure 1.** GPM's interpersonal hypersensitivity model of BPD as oscillating states in a person who cannot tolerate aloneness.

or internally disrupted when perceiving an interpersonal rupture or loss of support from others, falling apart and not feeling like there is purpose to living when alone.

At the level of moment-to-moment cognition, the interpersonal conflicts common in BPD can be viewed through the lens of rejection sensitivity, defined as the pervasive fear of rejection, expectation of rejection, and reactivity in response to perceived rejection. People with BPD score high on rejection sensitivity (RS) measures,[59,60] which aim to capture this constellation of cognitive biases and affective responses related to rejection. Ayduk and Gyurak[61] conceptualize rejection sensitivity as a cognitive-affective processing disposition—a result of the associations that a person makes among various expectations, situations, affective states, personal values, and self-regulatory abilities. They describe multiple implications of the cognitive-affective processing disposition inclined toward RS—that anxious expectations lead to perceived rejection and prevention efforts, and that perceived rejection leads then to hostility. This combination of cognitive biases and affective responses, they argue, creates a feedback loop in which hostility in response to perceived rejection elicits genuine rejection. In turn, this process increases fear of rejection and anxious expectations, making the cycle more potent for future interactions. High RS, in this way, is a self-fulfilling prophecy. Sensitivity to rejection feeds maladaptive patterns that increase likelihood of rejection, and by extension, isolation.

Like BPD, loneliness can be characterized by a feedback loop. Social support can be self-reinforcing, leading to behavioral and psychological changes (such as prosocial behavior or positive mood) that foster further connection and support.[39] In contrast, rejection, isolation, and loneliness create negative social expectations. This perpetuates distancing behaviors and enhances expectations, breeding a self-fulfilling prophecy similar to rejection sensitivity.[12] When loneliness is conceptualized as a major destabilizing factor, expanding the stability of one's social network can be a pragmatic step toward immediately reducing vulnerability to loneliness rather than first focusing on internal representations of relationships. Figure 2 shows proposed interventions for addressing interpersonal hypersensitivity.

## Loneliness as a Clinical Target in the Process of Recovery from BPD

The concept of recovery from BPD has gained recent attention. Researchers have begun focusing on factors beyond symptomatic remission that contribute to patients' development of a full and enjoyable life.[62-64] In one study, a sample of patients currently receiving BPD treatment were asked to describe their goals and understanding of what recovery from BPD would mean.[65] Goals included improved relationships, more social contact, and less social isolation. People with BPD report entering treatment with the goal of improving interpersonal relationships; some describe a desire to fit in.[66] Liljedahl and colleagues[63] interviewed patients who self-identified as having recovered from BPD and found that close relationships were central to stabilizing recovery and cultivating a meaningful life. In this study, respondents stated the feeling of being loved or lovable was central to full recovery. Some even referenced caring for animals as an important component of their journeys and, at points, an easier way to achieve valuable feelings of connection. Overall, patients gained or deepened their sense of self by examining themselves in relation to close others.

While empirically validated treatments for BPD provide skills and fortify social-cognitive capacities, they tend to centralize individual psychotherapy as the vehicle for change. Group therapy, however, is an effective component of evidence-based BPD treatment.[67,68] It likely enhances treatment effects by providing a forum to apply DBT and MBT skills, and an opportunity to socialize with peers rather than a caregiving figure. Groups naturally provide immediate social connection and space for patients to practice social behavior in a safe and supportive environment. For some patients with particularly small or harmful social networks, group treatment may be the only form of frequent social contact that allows for constructive social learning. In groups, patients can receive explicit instruction

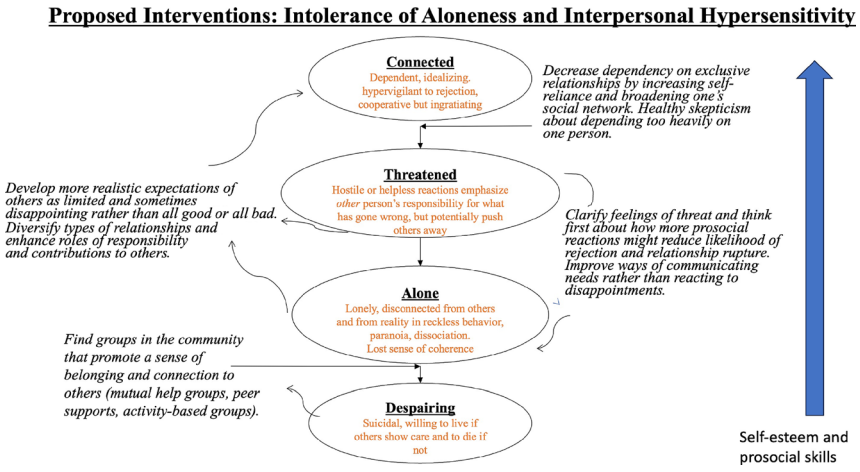


**Figure 2.** Strategies to disrupt the cycle of interpersonal hypersensitivity.

on rules and community values. Since social networks of people with BPD are skewed toward intense and exclusive relationships,[18] participation in group treatment can also provide balance, allowing patients to form lower-stakes relationships, and establish less dependent caretaking and more socially collaborative dynamics.

Group therapies for BPD provide broad symptomatic outcome effects in the meta-analytic literature.[68] Despite the benefits of group therapy, existing formats of empirically validated BPD treatment do not explicitly emphasize social rehabilitation outside of therapeutic settings.

### A Social Rehabilitative Public Health Model for People with BPD

Because social connection is both challenging and central to BPD recovery, effective rehabilitative interventions targeting expansion of social networks could bring substantial clinical benefit. Orientating treatment toward social networks is compatible with public health-focused methods. Such approaches aim to strategically allocate treatment resources to overcome access limitations of traditional psychotherapeutic treatment.[69-71] Utilizing social networks is also compatible with group treatment and harnesses low-cost community resources adjacent to or outside the clinical realm.

There are also clear benefits to connecting people with BPD to nonclinical community resources. Reviews of social network interventions in broader mental health populations indicate that the best outcomes stem from community activities in line with patients' genuine interests.[72,73] These outcomes point to the potential for leveraging organized activities, such as gardening groups,[74] sports, and artistic endeavors, and even engaging in individualized pursuits in a shared space.[75] Psychosocial interventions geared toward social rehabilitation are also promising from an economic perspective. They require relatively few resources and much of BPD's societal cost accrues via lost productivity.[76]

### Vocational supports

Vocational and peer support are receiving increased attention as psychosocial interventions. They may form valuable components of a broader social rehabilitative model and provide instructive models for loneliness-targeted interventions. Employment support can be essential to solidifying behavioral change in socially relevant contexts. It can provide scaffolding for more self-reliance by organizing daily activities and structuring relationships with others. Patients' vocational records are predictive of symptom remission,[77] and the absence of consistent work (or school attendance) is associated with failure to recover from BPD.[78,8] Like social connection, work has broad benefits. Existing BPD research shows positive effects in areas ranging from self-esteem[79] to physical health.[80] Its outcomes can be self-reinforcing. Increased self-esteem and sense of identity can help patients process interpersonal events differently and experience less interpersonal hypersensitivity in all social contexts, including at work.[3]

Vocational support is a scalable and low-resource intervention. For example, Individual Placement and Support (IPS), one effective intervention that helps with employment of people with severe mental illness, is estimated to cost only $4000 a year per person.[81] IPS and other existing vocational interventions appear somewhat effective for people with BPD; though, there are some limitations and need for refinement to best serve this specific population. One investigation of over 335 patients receiving IPS services found no difference in the rate or average speed of gaining competitive employment between those with personality disorders and those with other serious mental illnesses.[82] Another large study (N = 650) of IPS outcomes for people with personality disorders found that those with Cluster B personality disorders (borderline, antisocial, histrionic, or narcissistic) were less likely to find and maintain employment than those with Cluster A (paranoid, schizoid) or C personality disorders (avoidant, dependent, obsessive-compulsive).[83] The vast majority (83%) of patients in the Cluster B category had BPD. Qualitative evidence[84-86] indicates that supportive employment staff perceive some challenges specific to working with patients with PDs. They largely cite interpersonal difficulties, such as negative self-image, poor emotional regulation, difficulty with boundaries, and splitting, as impediments to vocational success. Patients recognize many of these same barriers.[86]

Recently, more tailored interventions have been designed and tested to help people with BPD gain and maintain employment. In one study, vocational rehabilitation staff at a hospital in Switzerland were trained in GPM and interviewed after nine months of post-training practice.[87] Thematic analysis revealed generally positive attitudes toward the training in this small sample (N = 5), both immediately after and at nine-month follow-up. Borderline Intervention for Work Integration is another vocational intervention designed for this population.[88] A recent pilot test of this eleven-session group and individual intervention indicated satisfaction from patients, although effects on employment and relevant variables, such as motivation and self-esteem, were not observable. These outcomes may be due to the study's small sample size (N = 12). A recent scoping review of vocational interventions for people with BPD[89] provides a synthesis of common facilitators of successful vocational intervention across studies: integration of psychotherapy or emotional support, communication among all parties in a patient's care and vocation, program structure conducive to developing healthy routines, and design specific to BPD. Psychoeducation about BPD symptoms and core difficulties, and their likely effects on vocational functioning, is needed to enhance such interventions.

### Peer supports

Peer support services are a new but increasingly prevalent intervention for people with BPD.[90] Tested interventions have been effective for both symptomatic remission and social connection,[91] with qualitative analyses highlighting social connection as a major benefit reported by patients.[92,90] The influence of these groups on feelings of connection shows promise for

potential interventions to reduce loneliness. The group modality also makes them affordable and practical. Patient accounts emphasize feelings of connection, as well as hope and meaningfulness,[92,90] further underscoring the association between social connection and developing a fulfilling life.

Working as a peer support specialist also holds promise as a recovery approach. Doing so provides an opportunity to increase social connection and self-sufficiency. While published investigations primarily focus on how peer groups influence those attending as patients, limited reporting on the peer specialist experience indicates that this role provides satisfaction and meaningfulness.[92] While this study also identified important areas for improvement, such as increased supervision and better communication between mental health clinicians and peer workers, early evidence suggests that peer support programs may significantly benefit peer workers in later stages of the recovery process.

Existing investigations of peer, vocational, and other psychosocial interventions for BPD provide compelling evidence that such nonclinical forms of support can create meaningful change in patients' lives.[65,66] As the bulk of research is relatively recent and often qualitative and exploratory, additional investigations should be conducted to innovate, test, and refine these interventions. Current evidence is sufficient, however, to suggest that clinicians should use these interventions to help BPD patients connect with others and feel less lonely. Increased social connection is a motivating goal[65,66] that is naturally compatible with clinical and functional improvement.

## Discussion and a Proposal for Extending the Network of Therapeutic Interventions for BPD

Evidence generated from investigations of loneliness and social networks supports clinical observation and theoretical perspectives of BPD as a disorder of core interpersonal dysfunction. Loneliness is common in people with BPD. Though rooted in social isolation, the subjective experience of loneliness extends beyond the objective conditions of social networks. People with BPD are more isolated than those without; they also feel greater loneliness relative to their objective degree of social isolation. BPD and loneliness share overlapping genetic causes and bring similarly poor prognoses for physical health, stress resilience, and overall mortality. In addition, the developmental trajectories of young people with high BPD symptom burden continuously diverge from those of their peers, making opportunities for life, identity, and relationship-building activities more and more distant and fragile. Some evidence indicates that loneliness and overall social impairment are among the most difficult aspects of BPD to address in treatment, even though they are among the symptoms patients are most eager to change.

While many psychotherapeutic interventions that are effective for BPD target improved relational functioning, they largely operate within protective therapeutic environments. Life outside of treatment is discussed, but active clinical management of life problems, seeking and managing employment, and balancing vocational activities with daily living is rarely part of manualized therapies. Many in the specialist world are advocating sequential migration of patients through multiple intensive specialist psychotherapies.[93] This practice of stringing together lengthy and inaccessible therapies continuously socializes patients into dyadic caregiving in treatment settings rather than emphasizing self-reliance in the real world. GPM, which aims to ease interpersonal stress sensitivity by promoting self-reliance and work in the community, also encourages multimodal case management. Incorporating interdisciplinary team players and community resources can diversify and broaden social contact and connections for the person with BPD, as well as reduce reliance on psychotherapists. A broader social network of less intensive relationships can foster social skill development and reduce reliance on discrete and intense relationships. Occupational therapists, vocational coaches, and other clinical supports can also be better utilized to help patients with BPD find a niche in the world.

Emerging lines of investigation provide initial evidence that social connection can be a valuable treatment component and an important marker of recovery. Further research exploring effective psychosocial intervention strategies that increase connection would be valuable. Any support in building small connections can provide some relief from loneliness and work against cycles of dependency, exclusivity, and volatility in social relations. Additionally, benefits achieved through community resource-driven interventions are valuable in a landscape in which demand for traditional psychotherapeutic treatment drastically outweighs supply. More attention should also be paid to the extended recovery period for patients with BPD, beyond initial symptom reduction. Greater investment in this later treatment phase is critical and requires further research to help patients work independently, among peers, and in relationship with others to solidify and stabilize their personality functioning.

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## REFERENCES

1. Gunderson JG. The borderline patient's intolerance of aloneness: insecure attachments and therapist availability. The American Journal of Psychiatry 1996;153:752–8.
2. Adler G, Buie DH. Aloneness and borderline psychopathology: the possible relevance of child development issues. The International Journal of Psycho-Analysis 1979;60:83–96.
3. Choi-Kain LW, Masland SR, Finch EF. Corrective experiences to enhance trust: clinical wisdom from good (enough) psychiatric management. Journal of Personality Disorders 2023;37:559–79.
4. Miller CE, Townsend ML, Day NJS, Grenyer BFS. Measuring the shadows: A systematic review of chronic emptiness in borderline personality disorder. PloS One 2020;15:e0233970.

5. Bohus M, Limberger MF, Frank U, Chapman AL, Kühler T, Stieglitz RD. Psychometric properties of the Borderline Symptom List (BSL). Psychopathology 2007;40:126–32.
6. Choi-Kain LW, Zanarini MC, Frankenburg FR, Fitzmaurice GM, Reich DB. A longitudinal study of the 10-year course of interpersonal features in borderline personality disorder. Journal of Personality Disorders 2010;24:365–76.
7. Skodol AE, Pagano ME, Bender DS, et al. Stability of functional impairment in patients with schizotypal, borderline, avoidant, or obsessive-compulsive personality disorder over two years. Psychological Medicine 2005;35:443–51.
8. Zanarini MC, Frankenburg FR, Reich DB, Fitzmaurice G. Time to attainment of recovery from borderline personality disorder and stability of recovery: a 10-year prospective follow-up study. The American Journal of Psychiatry 2010;167:663–7.
9. McMain SF, Guimond T, Streiner DL, Cardish RJ, Links PS. Dialectical behavior therapy compared with general psychiatric management for borderline personality disorder: clinical outcomes and functioning over a 2-year follow-up. The American Journal of Psychiatry 2012;169:650–61.
10. Office of the Surgeon General. Our epidemic of loneliness and isolation: the U.S. Surgeon General's advisory on the healing effects of social connection and community. Washington, DC: U. S. Department of Health and Human Services, 2023.
11. Russell D, Peplau LA, Cutrona CE. The revised UCLA Loneliness Scale: concurrent and discriminant validity evidence. Journal of Personality and Social Psychology 1980;39:472–80.
12. Hawkley LC, Cacioppo JT. Loneliness matters: a theoretical and empirical review of consequences and mechanisms. Annals of Behavioral Medicine 2010;40:218–27.
13. Mehrpour A, Hoffman A, Widmer ED, Staerklé C. Social ties and social identification: influences on well-being in young adults. Journal of Social and Personal Relationships 2024;41:3085–108.
14. Coyle CE, Dugan E. Social isolation, loneliness and health among older adults. Journal of Aging and Health 2012;24:1346–63.
15. Liebke L, Bungert M, Thome J, et al. Loneliness, social networks, and social functioning in borderline personality disorder. Personality Disorders 2017;8:349–56.
16. Nenov-Matt T, Barton BB, Dewald-Kaufmann J, et al. Loneliness, social isolation and their difference: a cross-diagnostic study in persistent depressive disorder and borderline personality disorder. Frontiers in Psychiatry 2020;11:608476.
17. Ikhtabi S, Pitman A, Maconick L, et al. The prevalence and severity of loneliness and deficits in perceived social support among who have received a 'personality disorder' diagnosis or have relevant traits: a systematic review. BMC Psychiatry 2024;24:21.
18. Lazarus SA, Cheavens JS. An examination of social network quality and composition in women with and without borderline personality disorder. Personality Disorders 2017;8:340–8.
19. Clifton A, Pilkonis PA, McCarty C. Social networks in borderline personality disorder. Journal of Personality Disorders 2007:21:434–41.
20. Schulze A, Streit F, Zillich L, et al. Evidence for a shared genetic contribution to loneliness and borderline personality disorder. Translational Psychiatry 2023;13:398.
21. Schermer JA, Colodro-Conde L, Grasby KL, et al. Genetic and environmental causes of individual differences in borderline personality disorder features and loneliness are partially shared. Twin Research and Human Genetics 2020;23: 214–20.
22. Skaug E, Czajkowski NO, Waaktaar T, Torgersen S. The role of sense of coherence and loneliness in borderline personality disorder traits: a longitudinal twin study. Borderline Personality Disorder and Emotion Dysregulation 2022;9:19.
23. Sinnaeve R, van den Bosch LM, van Steenbergen-Weijenburg KM. Change in interpersonal functioning during psychological interventions for borderline personality disorder—a systematic review of measures and efficacy. Personality and Mental Health 2015;9:173–94.
24. McMain SF, Links PS, Gnam WH, et al. A randomized trial of dialectical behavior therapy versus general psychiatric management for borderline personality disorder. The American Journal of Psychiatry 2009;166:1365–74.
25. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Washington, DC: APA, 2013.
26. Caspi A, Harrington H, Moffitt TE, Milne BJ, Poulton R. Socially isolated children 20 years later: risk of cardiovascular disease. Archives of Pediatrics & Adolescent Medicine 2006;160:805–11.
27. Hawkley LC, Cacioppo JT. Aging and loneliness: downhill quickly? Current Directions in Psychological Science 2007;16:187–91.
28. Cohen S, Doyle WJ, Skoner DP, Rabin BS, Gwaltney JM. Social ties and susceptibility to the common cold. JAMA 1997;277:1940–4.
29. Rico-Uribe LA, Caballero FF, Martín-María N, Cabello M, Ayuso-Mateos JL, Miret M. Association of loneliness with all-cause mortality: a meta-analysis. PLoS One 2018;13:e0190033.
30. Holt-Lunstad J, Smith TB, Layton JB. Social relationships and mortality risk: a meta-analytic review. PLoS Medicine 2010;7: e1000316.
31. El-Gabalawy R, Katz LY, Sareen J. Comorbidity and associated severity of borderline personality disorder and physical health conditions in a nationally representative sample. Psychosomatic Medicine 2010;72:641–7.
32. Frankenburg FR, Zanarini MC. The association between borderline personality disorder and chronic medical illnesses, poor health-related lifestyle choices, and costly forms of health care utilization. The Journal of Clinical Psychiatry 2004;65:1660–5.
33. Powers AD, Oltmanns TF. Personality disorders and physical health: a examination of physical functioning, healthcare utilization, and health-related behaviors in middle-aged adults. Journal of Personality Disorders 2012;26:524–38.
34. Beck L. Social status, social support, and stress: a comparative review of the health consequences of social control factors. Health Psychology Review 2007;1:186–207.
35. Dhabhar FS. Effects of stress on immune function: the good, the bad, and the beautiful. Immunologic Research 2014;58:193–210.
36. Cohen S, Janicki-Deverts D, Miller GE. Psychological stress and disease. JAMA 2007;298:1685–7.
37. Matthews KA, Katholi CR, McCreath H, et al. Blood pressure reactivity to psychological stress predicts hypertension in the CARDIA study. Circulation 2004;110:74–8.
38. Uchino BN, Cacioppo JT, Kiecolt Glaser JK. The relationship between social support and physiological processes: a review with emphasis on underlying mechanisms and implications for health. Psychological Bulletin 1996;199;488–531.
39. Uchino BN. Social support and health: a review of physiological processes potentially underlying links to disease outcomes. Journal of Behavioral Medicine 2006;29:377–87.
40. Reilly EB, Gunnar MR. Neglect, HPA axis reactivity, and development. International Journal of Developmental Neuroscience 2019;78:100–8.
41. Tate AE, Sahlin H, Liu S, et al. Borderline personality disorder: associations with psychiatric disorders, somatic illnesses, trauma, and adverse behaviors. Molecular Psychiatry, 2022;27:2514–21.
42. Allen TA, Dombrovski AY, Soloff PH, Hallquist MN. Borderline personality disorder: stress reactivity or stress generation? A prospective dimensional study. Psychological Medicine 2022; 52:1014–21.
43. Powers AD, Gleason ME, Oltmanns TF. Symptoms of borderline personality disorder predict interpersonal (but not independent) stressful life events in a community sample of older adults. Journal of Abnormal Psychology 2013;12:469–74.
44. Conway CC, Boudreaux M, Oltmanns TF. Dynamic associations between borderline personality disorder and stressful life

events over five years in older adults. Personality Disorders 2018;9:521–9.
45. Ni X, Chan K, Bulgin N, et al. Association between serotonin transporter gene and borderline personality disorder. Journal of Psychiatric Research 2006;40:48–53.
46. Lyons-Ruth K, Melnick S, Patrick M, Hobson RP. A controlled study of hostile-helpless states of mind among borderline and dysthymic women. Attachment and Human Development 2006;9:1–16.
47. Caspi A, Harrington H, Milne B, Amell JW, Theodore RF, Moffitt TE. Children's behavioral styles at age 3 are linked to their adult personality traits at age 26. Journal of Personality 2003;71:495–513.
48. Stepp SD, Whalen DJ, Scott LN, Zalewski M, Loeber R, Hipwell AE. Reciprocal effects of parenting and borderline personality disorder symptoms in adolescent girls. Development and Psychopathology 2014;26:361–78.
49. Winsper C, Hall J, Strauss VY, Wolke D. Aetiological pathways to Borderline Personality Disorder symptoms in early adolescence: childhood dysregulated behaviour, maladaptive parenting and bully victimisation. Borderline Personality Disorder and Emotion Dysregulation 2017;4:10.
50. Haltigan JD, Vaillancourt T. Identifying trajectories of borderline personality features in adolescence: antecedent and interactive risk factors. Canadian Journal of Psychiatry Revue Canadienne de Psychiatrie 2016;61:166–75.
51. Bagge C, Nickell A, Stepp S, Durrett C, Jackson K, Trull TJ. Borderline personality disorder features predict negative outcomes 2 years later. Journal of Abnormal Psychology 2004;113:279–88.
52. Skodol AE, Gunderson JG, McGlashan TH, et al. Functional impairment in patients with schizotypal, borderline, avoidant, or obsessive-compulsive personality disorder. The American Journal of Psychiatry 2002;159:276–83.
53. Hastrup LH, Jennum P, Ibsen R, Kjellberg J, Simonsen E. Welfare consequences of early-onset Borderline Personality Disorder: a nationwide register-based case-control study. European Child & Adolescent Psychiatry 2022;31:253–60.
54. Skodol AE, Gunderson JG, Grilo CM, McGlashan TH, Morey LC. Childhood maltreatment associated with adult personality disorders: findings from the Collaborative Longitudinal Personality Disorders Study. Journal of Personality Disorders 2004;18:193–211.
55. Thadani B, Pérez-García AM, Bermúdez J. Functional impairment in borderline personality disorder: the mediating role of perceived social support. Frontiers in Psychology 2022;13:883833.
56. Bateman A, Fonagy P. Effectiveness of partial hospitalization in the treatment of borderline personality disorder: a randomized controlled trial. American Journal of Psychiatry 1999;156:1563–9.
57. Clarkin JF, Levy KN, Lenzenweger MF, Kernberg OF. Evaluating three treatments for borderline personality disorder: a multiwave study. American Journal of Psychiatry 2013;11:269–76.
58. Gunderson JG. Handbook of good psychiatric management for borderline personality disorder. Washington, DC: American Psychiatric Press, 2014.
59. Cavicchioli M, Maffei C. Rejection sensitivity in borderline personality disorder and the cognitive-affective personality system: a meta-analytic review. Personality Disorders 2020;11:1–12.
60. Gao S, Assink M, Cipriani A, Lin K. Associations between rejection sensitivity and mental health outcomes: a meta-analytic review. Clinical Psychology Review 2017;57:59–74.
61. Ayduk Ö, Gyurak A. Applying the cognitive-affective processing systems approach to conceptualizing rejection sensitivity. Social and Personality Psychology Compass 2008;2:2016–33.
62. Renneberg B, Hutsebaut J, Berens A, et al. Towards an informed research agenda for the field of personality disorders by experts with lived and living experience and researchers. Borderline Personality Disorder and Emotion Dysregulation 2024;11:14.
63. Liljedahl SI, Mossberg A, Grenner H, Waern M. Life experienced as worth living and beyond: a qualitative study of the pathways to recovery and flourishing amongst individuals treated for borderline personality disorder. BMC Psychiatry 2023;23:838.
64. Soloff PH. Bridging the gap between remission and recovery in BPD: qualitative versus quantitative perspectives. Journal of Personality Disorders 2021;35:21–40.
65. Katsakou C, Marougka S, Barnicot K, et al. Recovery in borderline personality disorder (BPD): a qualitative study of service users' perspectives. PLoS One 2012;7:e36517.
66. Ng FYY, Carter PE, Bourke ME, Grenyer BFS. What do individuals with borderline personality disorder want from treatment? a study of self-generated treatment and recovery goals. Journal of Psychiatric Practice 2019;25:148–55.
67. McLaughlin SPB, Barkowski S, Burlingame GM, Strauss B, Rosendahl J. Group psychotherapy for borderline personality disorder: a meta-analysis of randomized-controlled trials. Psychotherapy 2019;56:260–73.
68. Stoffers-Winterling JM, Storebø OJ, Kongerslev MT, et al. Psychotherapies for borderline personality disorder: a focused systematic review and meta-analysis. The British Journal of Psychiatry 2022;221:538–52.
69. Iliakis EA, Sonley AKI, Ilagan GS, Choi-Kain LW. Treatment of borderline personality disorder: is supply adequate to meet public health needs?. Psychiatric Services 2019;70:772–81.
70. Paris J. Stepped care: an alternative to routine extended treatment for patients with borderline personality disorder. Psychiatric Services 2013;64:1035–7.
71. Choi-Kain LW, Finch EF, Masland SR, Jenkins JA, Unruh BT. What works in the treatment of borderline personality disorder. Current Behavioral Neuroscience Reports 2017;4:21–30.
72. Brooks H, Devereux-Fitzgerald A, Richmond L, et al. Assessing the effectiveness of social network interventions for adults with a diagnosis of mental health problems: a systematic review and narrative synthesis of impact. Social Psychiatry and Psychiatric Epidemiology 2022;57:907–25.
73. Brooks H, Devereux-Fitzgerald A, Richmond L, et al. Exploring the use of social network interventions for adults with mental health difficulties: a systematic review and narrative synthesis. BMC Psychiatry 2023;23:486.
74. Suto MJ, Smith S, Damiano N, Channe S. Participation in community gardening: sowing the seeds of well-being. Canadian Journal of Occupational Therapy 2021;88:142–52.
75. Hassan SM, Giebel C, Morasae EK, et al. Social prescribing for people with mental health needs living in disadvantaged communities: the life rooms model. BMC Health Serv Res 2020;20:19.
76. Soeteman DI, Hakkaart-van Roijen L, Verheul R, Busschbach JJV. The economic burden of personality disorders in mental health care. J Clin Psychiatry 2008;69:259–65.
77. Zanarini MC, Frankenburg FR, Hennen J, Reich DB, Silk KR. Prediction of the 10-year course of borderline personality disorder. The American Journal of Psychiatry 2006;163:827–32.
78. Keuroghlian AS, Gunderson JG, Pagano ME, et al. Interactions of borderline personality disorder and anxiety disorders over 10 years. The Journal of Clinical Psychiatry 2015;76:1529–34.
79. Grenyer BFS, Townsend ML, Lewis K, Day N. To love and work: a longitudinal study of everyday life factors in recovery from borderline personality disorder. Personality and Mental Health 2022;16:138–54.
80. Cruitt PJ, Boudreaux MJ, Jackson JJ, Oltmanns TF. Borderline personality pathology and physical health: the role of employment. Personality Disorders 2018;9:73–80.
81. Drake RE, Bond GR. Individual placement and support: history, current status, and future directions. Psychiatry Clin Neurosci Rep 2023;2:e122.
82. Juurlink TT, Lamers F, van Marle HJF, et al. Individual placement and support and employment in personality disorders: a registry based cohort study. BMC Psychiatry 2022;22:188.

83. Dunand N, Golay P, Bonsack C, Spagnoli D, Pomini V. Individual placement and support effectiveness for personality disorders compared with other mental disorders: a retrospective study. Swiss Archives of Neurology, Psychiatry and Psychotherapy 2022;173:20–5.
84. Dunand N, Seydoux M, Teixeira Magalhaes M, et al. Supported employment coaches' difficulties and facilitators with clients diagnosed with personality versus other disorders: a qualitative study. Heliyon 2024;10:e32955.
85. Juurlink TT, Vukadin M, Stringer B, et al. Barriers and facilitators to employment in borderline personality disorder: a qualitative study among patients, mental health practitioners and insurance physicians. PLoS One 2019;14:e0220233.
86. Dahl K, Larivière N, Corbière M. Work participation of individuals with borderline personality disorder: a multiple case study. Journal of Vocational Rehabilitation 2017;46:377–88.
87. Dunand N, Golay P, Bonsack C, Spagnoli D, Pomini V. Good psychiatric management for borderline personality disorder: a qualitative study of its implementation in a supported employment team. PLoS One 2024;19:e0299514.
88. Nadine L, Kathy D, Marc C. Pilot evaluation of the newly developed borderline intervention for work integration. J Psychosoc Rehabil Ment Health 2024;20:1.
89. Kernot J, Baker A, Oster C, Petrakis M, Dawson S. Employment interventions to assist people who experience borderline personality disorder: a scoping review. International Journal of Social Psychiatry 2023;69:1845–55.
90. Dahlenburg SC, Bartsch DR, Giles JA, Koehne KA, O'Sullivan J. Experiences of a peer group for people diagnosed with borderline personality disorder: a qualitative interview study. Personality and Mental Health 2024;18:166–76.
91. Jewell M, Bailey RC, Curran RL, Grenyer BFS. Evaluation of a skills-based peer-led art therapy online-group for people with emotion dysregulation. Borderline Personality Disorder and Emotion Dysregulation 2022;9:33.
92. Barr KR, Townsend ML, Grenyer BFS. Using peer workers with lived experience to support the treatment of borderline personality disorder: a qualitative study of consumer, carer and clinician perspectives. Borderline Personality Disorder and Emotion Dysregulation 2020;7:20.
93. Stoffers-Winterling JM, Storebø OJ, Simonsen E, et al. Perspectives on dialectical behavior therapy and mentalization-based therapy for borderline personality disorder: same, different, complementary?. Psychology Research and Behavior Management 2022;15:3179–89.