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# Stigmatizing Beliefs and Attitudes Held by Students Toward Borderline Personality Disorder: Recovery Knowledge as a Moderator

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Philadelphia College of Osteopathic Medicine

Department of Psychology

STIGMATIZING BELIEFS AND ATTITUDES HELD BY STUDENTS  
TOWARD BORDERLINE PERSONALITY DISORDER:  
RECOVERY KNOWLEDGE AS A MODERATOR

By Danyelle C. Salpietro

Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Psychology

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DEPARTMENT OF PSYCHOLOGY

Dissertation Approval

This is to certify that the thesis presented to us by Danyelle C. Salpietro on the 28<sup>th</sup> day of April, 2017, in partial fulfillment of the requirements for the degree of Doctor of Psychology, has been examined and is acceptable in both scholarship and literary quality.

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## Abstract

The purpose of this study was to determine whether recovery knowledge in psychology doctoral students reduced stigma toward individuals with borderline personality disorder (BPD). Participants of this study consisted of 287 psychology doctoral students who differed in theoretical orientation, program type, clinical experience, and program year. More specifically, this study examined differences between different levels of recovery knowledge (low, medium, high) and different diagnoses (major depressive disorder [MDD], generalized anxiety disorder [GAD], BPD) on expressed stigma. Each student completed the Recovery Knowledge Inventory (RKI), read a vignette describing either BPD, depression, or anxiety, completed the Attribution Questionnaire (AQ-27) based on the vignette, and completed a demographic questionnaire. A two-way analysis of variance (ANOVA) was used to determine whether recovery knowledge moderates the relationship between diagnoses and stigma. The results suggested that diagnosis and recovery knowledge independently affected the stigma ratings. BPD and MDD were more stigmatized than GAD; however, there was no significant difference between the stigma ratings for BPD and MDD. Those who had high recovery knowledge had lower stigmatizing attitudes and beliefs than those that had medium or low levels of recovery knowledge. Recovery knowledge did not moderate the relationship between diagnosis and stigma. Furthermore, participants who had DBT training did not have lower stigma ratings. This study revealed that although recovery knowledge reduces stigma, BPD is still highly stigmatized by psychologists-in-training. Future research on ways to train doctoral psychology students to increase self-awareness of their own stigmatizing attitudes, combat stigma, and implement recovery-oriented practices is needed.

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## **Chapter 1: Introduction**

### **Statement of the Problem**

Borderline Personality Disorder (BPD) is characterized as a pervasive pattern of unstable emotions, close relationships, and self-image with marked impulsive behaviors (American Psychiatric Association [APA], 2013). Affective instability, inability to self-soothe, self-destructive behavior, suicidality, and impulsivity are just a few of the multidimensional problems with which individuals with BPD struggle. Estimates suggest that between 1.6% and 5.9% of the population has BPD. The prevalence rate in treatment settings is approximately 6% in primary care, 10% in outpatient clinics, and 20% in inpatient hospitals (APA, 2013). Although individuals with personality disorders are frequent consumers of mental health services and resources, patients with BPD typically seek and receive more treatment than individuals diagnosed with other personality disorders (Soeteman, Hakkaart-van Roijen, Verheul, & Busschbach, 2008; Zanarini, Frankenburg, Khera, & Bleichmar, 2001).

The chronic nature of the illness, failed responses to treatment, unpredictable and suicidal behaviors, and intense array of emotions often demand significant emotional resources of the clinician (Aviram, Brodsky, & Stanley, 2006). It may become difficult for clinicians to separate the pathology from the characteristics of the individual (Aviram et al., 2006). If the individual is viewed as the problem and not the pathology, he or she is likely to be stigmatized by the clinician (Aviram et al., 2006).

Stigma has been defined as “the perception of a negative attribute that becomes associated with global devaluation of the person” (Katz, 1981). Countless studies have demonstrated that clinicians, psychiatrists, nurses, and mental health staff who treat

or interact with individuals with BPD perpetuate stigmatization (Aviram et al., 2006). Individuals with BPD have been viewed by clinicians as manipulative, chaotic, high strung, and a waste of time (Commons Treloar, 2009). The clinician may become emotionally distant toward the patient, dismiss or minimize the patient's difficulties, overlook strengths, and lack empathy, which may ultimately affect success of the therapeutic intervention (Aviram, Hellerstein, Gerson, & Stanley, 2004; Fraser & Gallop, 1993). Moreover, stigmatization by therapists could lead to unpleasant interactions that affect the therapeutic alliance negatively (Aviram et al., 2004).

Stigma associated with personality disorders has received less attention compared to other mental illnesses (Aviram et al., 2006). Stigma is especially detrimental to individuals with BPD because their difficulties are often generated by or experienced within the context of interpersonal relationships and situations (Aviram et al., 2006). Negative attitudes and lack of optimism about patient recovery can unintentionally influence the way mental health staff behaves toward the patient (Widiger & Weissman, 1991). To reduce the psychological distress of the patient and stigma among mental health practitioners, a recovery-oriented delivery of treatment may be adopted, which offers patients hope and a greater quality of life (Bellack, 2006).

The recovery model includes providing and encouraging empowerment, hope, individual choice, interpersonal and peer support, and experiences of optimism toward treatment and recovery (Warner, 2009). It focuses on collaborative treatment approaches, helping the patient find productive roles in society, and reducing stigma (Warner, 2009). An evaluation of the recovery transformation demonstrated that recovery-oriented treatment had a positive impact on the therapeutic alliance, rates of overnight

hospitalizations, patients' ability to be productive in society, and professional skills of employees (Malinovsky et al., 2013). In a recovery-oriented treatment environment, mental health professionals work collaboratively with BPD patients to develop their autonomy and promote choice as a means of fostering their independence and productivity in society. The therapist creates an atmosphere of hope and optimism and instills the belief that recovery is possible and attainable to facilitate the recovery process (National Institute for Health and Care Excellence, 2009). If the therapist is not knowledgeable about the recovery model, has low expectations of treatment success, and does not believe that recovery is possible and attainable for every patient, the therapist may be maintaining a belief set that could affect the therapeutic alliance and degree of empathy and, ultimately, may contribute to poor treatment outcomes.

### **Purpose of Study**

The purpose of this study was to determine whether recovery knowledge in psychology doctoral students reduces stigma toward individuals with BPD. Research findings demonstrate that mental health professionals have stigmatizing attitudes and behaviors toward individuals with BPD. Stigma can be detrimental to the treatment process of these patients. Therefore, this study sought to measure recovery knowledge in psychology doctoral students because graduate school is crucial for the development of future values and beliefs (Baxter, Singh, Standen, & Duggan, 2001; Kuhnigk et al., 2009). Training in the recovery model leads to positive changes in individuals' recovery knowledge, attitudes, and skills, and it has been demonstrated that patients tend to have better treatment outcomes when their therapists embrace recovery model values (Barczyk, 2015; Higgins et al., 2012; Malinovsky et al., 2013).

## Chapter 2: Literature Review

### Borderline Personality Disorder

BPD is a pervasive pattern of unstable interpersonal relationships, moods, emotions, and self-image. In order for an individual to be diagnosed with BPD, he or she must meet the diagnostic criteria of five or more symptoms listed in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5; APA, 2013)*. Of individuals diagnosed with BPD, 75% are female. Individuals with BPD have intense fears of abandonment and display inappropriate anger when faced with separation or changes in their plans. They will try frantically to avoid real or imagined abandonment (criterion 1). Their interpersonal relationships tend to be intense, unstable, and alternate between idealization and devaluation (criterion 2; APA, 2013). There are also dramatic shifts in self-image, as individuals may change their goals, values, career plans, sexual identity, and friends (criterion 3). Individuals diagnosed with BPD are impulsive in at least two areas of their lives (criterion 4). They may spend money irresponsibly, gamble, binge eat, drive recklessly, engage in unprotected sex, and/or abuse substances (APA, 2013). They may exhibit frequent suicidal attempts, gestures, or threats, or self-mutilate (criterion 5). Self-mutilation, suicide attempts, and threats are common for individuals suffering from BPD. Suicide completion occurs in 8-10% of individuals with BPD (APA, 2013). Recurrent suicide ideation and/or attempts are often reasons that BPD individuals present to treatment (APA, 2013). Individuals diagnosed with BPD may exhibit affective instability caused by a marked reactivity of mood. Therefore, individuals may be anxious, irritable, or episodically dysphoric for a few hours (criterion 6). It is also likely that they suffer from chronic feelings of emptiness (criterion 7), are

bored easily, and express or control anger inappropriately or ineffectively (criterion 8). In addition, transient paranoid ideation or depersonalization may occur when under extreme stress (criterion 9; APA, 2013).

**History of borderline personality disorder.** Medical records from Danish and British psychiatric institutions demonstrated that impulse-driven patients existed in clinical settings long before the development of the diagnostic category and the term *borderline* (Kroll, Carey, Sines, & Roth, 1982). Nevertheless, the origins of the diagnostic category trace back to psychoanalyst Adolph Stern's clinical observations. Stern observed that many of his patients did not fit into the classification system of that time, which primarily separated psychoses from neuroses (Gunderson & Links, 2008). Stern viewed severely disturbed, non-delusional, individuals as the most difficult and treatment-resistant patients. Further, these patients were in a subgroup that lacked a homogeneous diagnosis. Clinicians believed that these patients were neither neurotic nor psychotic, but were "on the border" of Bleuler's broadly defined schizophrenia diagnosis (Stone, 1990). In the 1950s, this subgroup gained attention when Robert Knight wrote prominent papers that described the term *borderline* as a patient being on the border of neurosis and psychosis (Gunderson & Links, 2008). Knight believed that staff members on inpatient units failed to identify the unique needs of this subgroup of patients, resulting in disagreements among staff about how to care for these individuals. Furthermore, he believed that this failure led to a lack of structure that these patients would need to avoid regression (Gunderson & Links, 2008). Psychoanalysts in hospital settings continued to use the term *borderline* to describe atypical, clinically troubling

cases involving patients that did not fit in the psychotic or neurotic categories until the late 1960s (Gunderson & Links, 2008).

In the late 1960s through early 1970s, three contributions progressed the understanding of what was defined vaguely as *borderline*. Kernberg (1967) viewed borderline as a personality organization and differentiated it from psychotic personality organization and neurotic personality disorganization. Individuals with a psychotic personality organization were viewed as sicker than those with a borderline personality organization, whereas individuals with a neurotic personality organization were viewed as healthier than individuals with one of the other two personality organizations. Kernberg characterized borderline personality organization as in three ways: weak identity formation, primitive defenses such as splitting or projective identification, and impaired ability to do reality testing when under stress (Kernberg, 1967). Kernberg gave rationale and organization to a classification system that integrated object relations and ego psychology. This classification system was a significant contribution to scholarly thinking about borderline personality disorder at the time, especially within the psychodynamic community (Kernberg, 1967).

Other researchers in the 1960s and 1970 also investigated this personality organization. For instance, Grinker, Werble, and Drye (1968) were the first researchers to recruit patients with borderline personalities to participate in a study. Based on his research, he developed the first empirically supported criteria for this personality structure. The criterion set included failures of self-identity, strong emotionally dependent relationships, depression based on loneliness, and the predominance of expressed anger (Grinker, Werble, & Drye, 1968). Furthermore, Gunderson and Singer

(1975) identified six key features that had to be present in an initial interview with a patient, and that provided a rationale for patients classified as having borderline personality disorder. These six features included the presence of intense affect that is usually depressive or hostile, history of impulsive behavior, social adaptiveness, psychotic experiences, loose thinking in unstructured situations, and relationships that fluctuate between transient superficiality and intense dependency (Gunderson, & Singer, 1975).

Spitzer and colleagues (1979) refined scholars' and clinicians' thinking about the broad range of what the term *borderline* had been used to describe when they distinguished borderline personality disorder from the broader understanding of the borderline personality. They separated borderline symptoms and characteristics into two distinct clinical presentations that had been encompassed previously under one diagnosis (Spitzer, Endicott, & Gibbon, 1979). The first presentation referred to instability and vulnerability characteristics, which were recognized as enduring borderline personality features (Spitzer et al., 1979). This clarification later became the basis of the borderline personality disorder criteria in the *DSM-III* (Sanislow, Grilo, & McGlashan, 2000). Additionally, the term *borderline* had also been used repeatedly to describe personality characteristics that were stable over time and somehow related genetically to chronic schizophrenia (Spitzer et al., 1979). The use of the term in this manner became the basis for schizotypal personality disorder in the *DSM-III* (Sanislow et al., 2000). Early researchers on this personality organization contributed to the development and understanding of the term *borderline* and, later, the condition known as BPD. Remarkably, the diagnostic criteria for BPD have been left relatively unchanged in the

*DSM-5* from when they were introduced in the *DSM-III* (Sanislow et al., 2000).

Therefore, the origins of each of the nine criteria are explored to increase the understanding of the compilation of symptoms that constitute BPD.

***Abandonment fears.*** Originally, this criterion needed to be differentiated from separation anxieties, as the abandonment fears in a patient with BPD tend to be less common and more pathological than separation anxieties in the anxiety category of the *DSM* (Gunderson & Links, 2008). Gunderson and Singer (1975) and Adler and Buie (1979) addressed this issue by describing abandonment fears relative to “intolerance of aloneness.”

***Unstable and intense relationships.*** The alternation between idealization and devaluation of others traces back to Klein’s (1946) construct of intrapsychic splitting. Kernberg (1967) identified the importance of splitting and theorized that splitting in BPD relates to intense anger toward caregivers that are still needed. Developmentally, this criterion is related to abandonment fears (Gunderson & Links, 2008).

***Identity disturbance.*** Also derived from Kernberg (1967), this criterion refers to his description of borderline personality organization. This criterion has weathered several modifications in order to differentiate it from identity issues that are common in specific parts of development. The unstable self-image or sense of self is associated with early attachment failures (Gunderson & Links, 2008).

***Impulsivity.*** This criterion developed from early literature that discussed problems of acting out as resistance to or avoidance of emotions and conflicts. Empirical research has differentiated impulsivity of individuals with borderline features from impulsivity found in individuals who are manic/hypomanic or antisocial. Impulsivity

found in patients with borderline features is often self-damaging (Gunderson & Links, 2008).

***Suicidal or self-mutilating behaviors.*** Due to frequent suicidal threats, gestures, attempts, or self-mutilating behaviors of individuals with BPD, this criterion has become diagnostically prototypical (Gunderson & Links, 2008).

***Affective instability.*** Clinicians observed that the basic pathology of BPD involved affective dysregulation that was also discovered in mood disorders, specifically what is now called bipolar disorder. Linehan (1993) and other clinicians have acknowledged that affective instability is the core psychopathology of BPD. It was suggested that the intense emotions drive the behavioral problems (Gunderson & Links, 2008; Linehan, 1993).

***Feelings of emptiness.*** This criterion is derived from the early literature of the object-relations theorist Melanie Klein suggesting that insufficiencies of early care-taking resulted ultimately in the child's inability to self-soothe (Gunderson & Links, 2008). As an exemplary criterion, emptiness was differentiated in BPD from depression, linking the subjective experience of emptiness to developmental failures.

***Anger.*** Kernberg (1967) believed that the source of BPD pathology was excessive aggression. He stated that excessive aggression was a result of temperamental excess or a response to the infant's excessive frustration. The excessive anger likely led to splitting or self-destructive behaviors (Gunderson & Links, 2008).

***Lapse in reality testing.*** Frosch (1964) distinguished breaks in a sense of reality (unsure whether experience is real) from the capability to test reality (being able to

correct distortions). Researchers show that lapses of reality testing in BPD can be related to childhood neglect and/or abuse.

**Risk factors and course of borderline personality disorder.** Until recently, the development of BPD was based on Linehan's (1993) biosocial theory, which hypothesized that emotion dysregulation emerged through biological vulnerabilities and environmental influences. Linehan proposed emotion dysregulation as the main component of BPD. Emotion dysregulation includes increased emotional sensitivity, an inability to control intense emotional responses especially during emotionally challenging events, and a slow return to baseline. Linehan suggested several biological factors that could lead to emotional dysregulation, such as limbic dysfunction. She also proposed that BPD developed in invalidating environments where emotional expression was not supported or tolerated and/or there were inconsistent responses to a display of emotions. Invalidation environments could reinforce extreme, problematic, and oscillating emotional expression while also communicating to the child that a display of emotions is unwarranted and should not be an external event (Linehan, 1993). Consequently, a child in this situation does not learn how to understand, regulate, tolerate, or label emotional responses. The child fails to learn to cope effectively with these emotional reactions. Instead, emotional inhibition and extreme emotional lability occurs (Linehan, 1993).

Over the last several decades, Linehan's (1993) biosocial theory has been refined and extended, via contributions from newer research on family interaction patterns, a focus on early childhood impulsivity, and a developmental lifespan perspective into the understanding of BPD etiology. Based on empirical research, Crowell, Beauchaine, and Linehan (2009) developed a biosocial developmental model which they believe leads to

BPD. This model focuses on the relationship between psychopathology and emotion dysregulation and cognitive, behavioral, emotional, and social outcomes (Crowell, Beauchaine, & Linehan, 2009). A child may be impulsive, have high emotional sensitivity, and/or have a negative affect and a caregiver may invalidate the child's emotions and negatively reinforce aversive expressions of emotion. These characteristics may create high-risk interactions. The child may also have biological vulnerabilities that could include genetic influences or brain abnormalities involving serotonin, dopamine, or the hypothalamic-pituitary-adrenal axis (Crowell et al., 2009). Therefore, invalidating interactions between the child and the caregiver, biological vulnerabilities, impulse control deficits, and the reinforcement of emotional inconsistency are interrelated. This biosocial development model suggests that this leads to heightened emotion dysregulation because, for example, a child may resort to more extreme expressions of his or her emotions to get his or her needs met. These transactions between individual vulnerabilities and invalidating environments increase the risk for psychopathology as the child ages into adulthood. Heightened emotion dysregulation could result in distortions in information processing and the inability to organize or control mood-dependent behavior (Crowell et al., 2009). When this process occurs repeatedly for an extended period, there is an increased risk for negative social (e.g., social isolation, problematic peer relationships), cognitive (e.g., low self-efficacy, hopelessness, disorganization, dissociation), emotional (e.g., emotional vulnerability, anger, sadness), and behavioral (e.g., withdrawal, avoidance, impulsivity, self-injurious behavior) outcomes (Crowell et al., 2009). Repeated maladaptive behaviors serve the function of emotion regulation and

avoidance which become reinforcing for the individual. Crowell, Beauchaine, and Linehan (2009) believe these processes form the etiology of BPD.

Another line of research has investigated risk factors associated with the development of BPD. Zanarini and colleagues (1997) conducted a study that assessed childhood experiences reported by 467 adult inpatients with personality disorders using semi-structured interviews. The interviewers were blind to clinical diagnoses. Of the 467 participants, 358 were diagnosed with BPD. Of those diagnosed with BPD, 91% reported that they were abused and 92% reported that they were neglected as a child (Zanarini et al., 1997). The emotional and physical abuse reported by individuals with BPD was perpetrated more often by a childhood caregiver than abusers reported by non-BPD study participants (Zanarini et al., 1997). The BPD diagnosed participants were also more likely to report having a parent or caregiver withdraw emotionally from them, treat them inconsistently, deny or not tolerate their feelings or thoughts, fail to protect them, and place them in a role of parents (Zanarini et al., 1997). They were also more likely to report sexual abuse by a non-caregiver. The risk factors predictive of a BPD diagnosis were found to be female gender, sexual abuse by a male non-caregiver, emotional denial by a male caregiver, and inconsistent treatment by a female caregiver (Zanarini et al., 1997). The researchers concluded that sexual abuse was not necessary for the development of BPD but other childhood experiences, particularly the experience of neglect, served as a significant risk factor for the development of BPD (Zanarini et al., 1997). The risk factors identified in this study are consistent with Crowell, Beauchaine, and Linehan's (2009) biosocial developmental theory of BPD regarding intolerance, denial, and lack of support of emotional expression.

A 203-question comprehensive retrospective interview about childhood was given to 66 patients with BPD and 109 controls (Bandelow et al., 2005). The interviewer asked questions about parental attitudes, family history of mental disorders, childhood traumatic life events, and birth risk factors. The participants with BPD reported their parents' attitudes as significantly more unfavorable in various aspects. There were higher rates of psychiatric disorders in the families of patients with BPD than the control subjects. Anxiety disorders, depression, and suicidality were among the most common psychiatric disorders reported. The frequency of reports of traumatic childhood life events was also significantly higher in patients with BPD than the controls. The reports included sexual abuse, violence, childhood illness, and separation from parents. Furthermore, premature birth was reported more often in the BPD group than the control group (Bandelow et al., 2005).

Bandelow et al. (2005) conducted a logistic regression model of possible etiological factors. The researchers found that childhood sexual abuse, familial neurotic spectrum disorders, unfavorable parental styles, and separation from parents influenced the development of BPD significantly. This is inconsistent with Zanarini et al.'s (1997) conclusion that sexual abuse was not necessary or sufficient for the development of BPD. It is possible that these conflicting conclusions could be a result of sample specificity. Although each study includes an inpatient population of individuals diagnosed with BPD, the results of each study are based on interviews and self-report of each patient's subjective experience. The interpretation and importance placed on the sexual abuse by the interviewer, interviewee, and researchers could explain the conflicting conclusions as to whether childhood sexual abuse is a risk factor that contributes to the development of

BPD. It is also possible that some risk factors, such as sexual abuse, only become salient when several other risk factors are present or if a given individual has a high biological vulnerability for emotional dysregulation. Despite the conflicting conclusions between both studies regarding the importance of sexual abuse history, unfavorable parental responses tend to be a consistent theme.

A longitudinal study examined the associations between problematic family functioning in early childhood, parental psychiatric diagnoses, early onset of psychiatric diagnoses, and symptoms of BPD in adulthood (Stepp, Olino, Klein, Seeley, & Lewinsohn, 2013). The study included 1,709 students from nine high schools in western Oregon that completed two assessments, one when they were adolescents and a follow-up assessment when they were between the ages of 24 and 30. Their parents were interviewed during these evaluations as well. At the time of recruitment, the inclusion criteria required the adolescents to have had a history of a depressive disorder, a history of non-mood disorders, or no history of psychopathology (Stepp et al., 2013). The results demonstrated that the most significant early risk factors for the development of BPD included maternal-child discord, maternal BPD, paternal substance use disorder, depression, and suicidality (Stepp et al., 2013). The results of this study are consistent with other research that identified problematic child and caregiver interactions and parental psychiatric issues as risk factors that contribute to the development of a BPD diagnosis. It is likely that parental issues involving substance abuse, depression, and suicidality perpetuate the discord between the child and caregiver that has been described in numerous studies.

Some studies have identified specific risk factors that contribute to the development of BPD. The main risk factors are both genetic and physiological. The APA (2013) concludes that BPD is approximately five times more common among biological relatives of individuals with diagnosable symptomology of BPD compared to the general population.

The course of BPD varies. The most common pattern is chronic instability in early adulthood. This includes episodes of impulsive and emotional dyscontrol and frequent use of mental health resources (APA, 2013). The most impairment and greatest risk of suicide exists in the young-adult years and gradually decreases as the individual ages. Conversely, impulsivity, intense emotions, and relationship problems tend to be lifelong (APA, 2013). Despite chronic dysfunction, many individuals with BPD attain greater stability in relationships in their 30s and 40s. Researchers demonstrate that individuals who engage in therapeutic interventions tend to show improvement during their first year of treatment (APA, 2013).

**Prevalence rate of treatment.** Due to the chronic instability and suicidality that is characteristic of individuals with BPD, mental health services tend to be utilized more frequently by these patients as compared to individuals with other mental health problems. One study used semi-structured interviews to gauge 664 patients' diagnosis and treatment history, specifically their utilization of mental health treatment (Bender et al., 2001). These participants were placed in four different personality groups that were representative of their clinical diagnosis, which was either schizotypal, borderline, avoidant, and obsessive-compulsive (Bender et al., 2001). These four groups were compared to patients with major depressive disorder. The results revealed that

participants with a personality disorder had more extensive histories of inpatient, outpatient, and psychopharmacologic treatment compared to individuals in the depression group. Specifically, when compared to the depression group, individuals with BPD had received more treatment and were significantly more likely to have received every type of psychotherapy except self-help and family/couples therapy (Bender et al., 2001). They were also more likely to have used psychopharmacologic treatment, specifically the use of antidepressants, mood stabilizers, and antipsychotic medications (Bender et al., 2001).

Another study used semi-structured interviews to assess the types and amounts of psychiatric treatment received by 290 patients with BPD and 72 patients with a different personality disorder (Zanarini et al., 2001). A significantly higher percentage of individuals with BPD than those with a different personality disorder reported a history of outpatient treatment and inpatient hospitalization (Zanarini et al., 2001). The participants with BPD were also significantly younger when they started taking medication and entered individual therapy. Additionally, they spent more time in psychiatric hospitals and individual therapy, and were on more psychiatric medication for longer than those with other personality disorders. Zanarini and colleagues (2015) used the same data set to assess the use of 16 different treatment modalities at baseline and at eight 2-year follow-up periods. The individuals with BPD reported utilizing 12 of the 16 treatment modalities at significantly higher rates. Only individual therapy, intensive individual therapy, couples/family therapy, and electroconvulsive therapy were used to the same degree by study participants regardless of diagnosis (Zanarini, Frankenburg, Reich, Conkey, & Fitzmaurice, 2015). Based on Zanarini et al.'s (2015) and Bender et al.'s (2001) research, family and couples therapy is utilized less often than other

treatment modalities by individuals with BPD. This is particularly interesting considering parental attitudes, parental and child discord, and childhood abuse were found to contribute to the development of BPD.

**Effective treatment.** High rates of treatment utilization, especially inpatient hospitalizations, by individuals with BPD create a high economic burden on society; this burden is significantly higher than that for the treatment of depression and anxiety disorders. Effective treatment for BPD needs to be a priority in order to reduce the high rates of inpatient hospitalizations and the economic burden of these hospital stays (Soeteman et al., 2008). Moreover, BPD has a historical reputation as being difficult to treat due to its complex and severely impairing nature, suicide risk, and high treatment dropout rates. It is important that individuals with BPD receive adequate and appropriate treatment. The most promising treatment approach, dialectical behavior therapy (DBT), was first introduced by Marsha Linehan (O'Connell & Dowling, 2014).

DBT is delivered typically by highly trained therapists in outpatient settings over a year timespan, and aims to change behavior and manage emotions. Although it uses principles of cognitive behavior therapy, DBT places greater emphasis on the learning and practice of new skills (O'Connell & Dowling, 2014). The treatment goals associated with DBT are to reduce behaviors that are parasuicidal, life-threatening, interfering with therapy, and significantly reducing the individual's quality of life (Linehan, Armstrong, Suarez, Allmon, & Heard, 1991). The major components of DBT include skill-based training that incorporates problem-solving skills and coping skills, individual psychotherapy, telephone calls that assist the individual to utilize appropriate skills to overcome obstacles, and consultation team meetings to enhance the therapists' skills and

increase support and motivation (O'Connell & Dowling, 2014). DBT has been evaluated in several randomized controlled trials and follow-up studies and has significant empirical support as an effective treatment for BPD (Hoffman, 1993; Koons et al., 2001; Linehan et al., 1991; Linehan et al., 2002; Linehan, Heard, & Armstrong, 1993; Linehan et al., 1999; Linehan, Tutek, Heard, & Armstrong, 1994; Turner, 2000; Verheul et al., 2003).

Although DBT is most well-known for its efficacy in the treatment of BPD, researchers found that cognitive behavior therapy (CBT) is also effective in reducing BPD symptomology. CBT is a structured, present-oriented treatment that focuses on the relationship between thoughts, feelings, and behaviors. A randomized control trial was conducted, where CBT in addition to treatment as usual (TAU) was implemented over the course of a year and compared to TAU alone in 106 individuals diagnosed with BPD (Davidson et al., 2006). The addition of CBT to usual treatment reduces the number of suicidal acts, dysfunctional beliefs, state anxiety, and symptom distress in individuals suffering from BPD (Davidson et al., 2006). Furthermore, researchers conducted a systematic literature search for economic evaluations regarding treatments for BPD and found CBT and schema-focused therapy to be cost-saving (Brettschneider, Riedel-Heller, & Konig, 2014).

Schema therapy focuses on early maladaptive schemas, core emotional needs, schema mode, and maladaptive coping styles. Not only is schema therapy a cost-saving treatment, it is also highly effective in treating BPD (Dickhaut & Arntz, 2014). These researchers divided BPD patients into two groups that would both receive weekly schema therapy in a combination of a group and individual format for two years. Both groups

utilized therapists that were trained in individual schema therapy; however, in order to explore training effects, only one group of therapists were trained specialists in group schema therapy (Dickhaut & Arntz, 2014). Treatment dropout was 33% in the first year and 5% in the second year without any between group differences (Dickhaut & Arntz, 2014). BPD manifestations were reduced significantly and symptoms, schemas, quality of life, and happiness improved. At 30 months, 77% of patients had recovered (Dickhaut & Arntz, 2014). The group that had therapists that were trained in group schema therapy improved faster than the group that did not have therapists trained in group schema therapy. Overall, the researchers concluded that a combination of group and individual schema therapy are effective in treating BPD when the therapists are trained properly (Dickhaut & Arntz, 2014).

Supportive therapy has been utilized in an outpatient setting with BPD patients who engage in non-suicidal self-injurious and suicidal behavior (Aviram et al., 2004). Supportive therapy focuses on the individual's strengths in order to enhance self-esteem and encourage the use of positive coping skills and adaptive responses. Supportive therapy and solution-focused approaches help address negative thinking patterns, emotion dysregulation, and impulsive behavior (Aviram et al., 2004). Supportive therapy is well tolerated by individuals with BPD who participate in self-injurious behaviors. The authors believe that supportive therapy may be efficacious in engaging a patient with BPD in treatment and minimizing the occurrence of self-injurious behavior (Aviram et al., 2004). A randomized outcome study compared two years of intensive individual and group mentalization-based psychotherapy to two years of less intensive supportive group therapy (Jorgensen et al., 2013). Mentalization-based therapy is a psychodynamically-

oriented treatment used to help individuals with BPD separate their own thoughts from the thoughts of others around them. The treatment outcome was assessed by a self-report questionnaire, interviews, and ratings of global assessment of functioning (GAF; Jorgensen et al., 2013). The results indicated that mentalization-based therapy and supportive therapy are both highly effective in the treatment of BPD (Jorgensen et al., 2013). In addition to psychotherapy, psychiatric drugs such as, selective serotonin reuptake inhibitors, mood stabilizers, and antipsychotics could serve as an adjunctive treatment depending on the display of symptoms (Tyrer & Silk, 2011).

**Remission of symptoms in borderline personality disorder.** One way of assessing the success of an intervention is by determining how many people can be described as “recovered.” In the biomedical model, recovery is understood as a return to baseline functioning (Mountain & Shah, 2008). Zanarini and colleagues (2010) conducted a study to determine how long it took individuals to attain recovery from BPD and assessed the stability of recovery. These researchers defined recovery as remission of symptoms and appropriate social and vocational functioning. A total of 290 individuals diagnosed with BPD were assessed five times for 10 years, typically every 2 years. The researchers determined that 50% of patients achieved symptom remission from BPD, 86% attained remission of symptoms for at least four years, and 93% attained remission of symptoms for at least two years. Over the study period, 34% of those who attained remission had at recurrences of symptoms and functional impairments. At least 15% of those who achieved four years of remission experienced a recurrence, and 30% of those who achieved two years of remission had a symptomatic recurrence (Zanarini, Frankenburg, Reich, & Garrett, 2010). The authors concluded that although recovery

from BPD appears difficult to attain, once recovery is attained, it is relatively stable over time (Zanarini et al., 2010). Furthermore, the results of the study are consistent with follow-up studies that used data collected in outpatient clinics. The *DSM-5* discussed follow-up studies indicating that after a 10-year period; more than 50% of individuals no longer meet full criteria for BPD based on their presenting symptomology and pattern of behaviors (APA, 2013). Even so, BPD is one of the most highly stigmatized mental illnesses (Aviram et al., 2006; Burland, 2007).

### **Stigma**

Stigma refers to people's negative, discriminatory, and discrediting behaviors and attitudes toward members of groups that are considered different based on socially disqualifying attributes (Katz, 1981). Some groups that could be described as stigmatized or of marginal social status include African Americans; senior citizens; physically disabled individuals; those who have chronic diseases or deformities; those who are lesbian, gay, bisexual, or transgender; criminals; prostitutes; and those who suffer from drug and alcohol addictions and/or mental illness (Katz, 1981). Social context can be crucial, as some attributes may be discredited in one setting and not another. Stigma can also vary depending on awareness of a particular stigma by the observer and/or stigmatized individual, the element of threat the observer feels, feelings of sympathy and/or pity for the possessor, and the extent to which the possessor is perceived to be responsible for the disqualifying attributes (Katz, 1981).

Jones and colleagues (1984) proposed that there are six dimensions of stigma: (a) concealability, which indicates how obvious or detectable the disqualifying attributes are, (b) course, referring to whether the stigmatizing attributes are reversible over time, (c)

disruptiveness, which indicates the level to which the disqualifying attributes obstruct interpersonal interactions, (d) aesthetics, which refer to the extent to which a particular mark elicits a reaction of disgust, (e) origin, which refers to how the condition originated, and (f) peril, referring to feelings of threat or danger that have been elicited by the stigmatized condition.

Link and Phelan (2001) offered a different conceptualization of stigma. They suggested that stigma exists when the following components converge: (a) individuals separate and label human differences, (b) dominant societal beliefs associate labeled individuals to undesirable characteristics and negative stereotypes, (c) the labeled individuals are placed in groups or categories that result in a degree of separation of “us” from “them,” and (d) individuals who are labeled experience loss of societal status and discrimination that limits their outcomes, ultimately making them unequal. Included in the formulation of stigma are emotional responses. Emotional responses are important because the individual being stigmatized can observe them. Furthermore, emotional responses may shape the behaviors toward the individual who is being stigmatized (Weiner, 1986).

**Mental health stigma.** As previously mentioned, there are many groups that are stigmatized based on differences that are considered socially disqualifying attributes. A study was conducted that determined which of these groups were least accepted in society. Approximately 660 health practitioners from the Italian, German, Greek, Chinese, Arabic and Anglo Australian communities rated the attitudes of people in their communities toward 20 different disability groups using social distancing scales (Westbrook, Legge, & Pennay, 1993). In all communities, it was found that people with

cerebral palsy, AIDS, mental retardation, and mental illness were the least accepted among the disabilities groups included in the study (Westbrook et al., 1993). These results are crucial because they highlight that a universal stigma exists toward those who have psychiatric illness.

Today, stigma toward mental illness remains particularly salient, and continues to serve as a barrier to obtaining treatment (Sickel, Seacat, & Nabors, 2014). Members of society including, family, employers, and treatment providers have been shown to hold implicit and/or overt stigmatizing attitudes and behaviors toward individuals with mental illnesses (Beales, 2001; Corrigan, & Watson, 2002; Westbrook et al., 1993).

Additionally, it has been shown that individuals with mental illnesses often have self-stigmatizing attitudes and behaviors (Corrigan & Watson, 2002). Both societal and internalized mental health stigma often serve as barriers to individuals with mental illnesses because they influence various domains in an individual's life, such as self-perception, interpersonal relationships, employment and housing, physical and mental health, and whether the individual will seek mental health treatment (Sickel et al., 2014). As such, it is imperative to explore the stigmatizing attitudes, beliefs, and behaviors held by treatment providers toward individuals with mental illness.

**Stigmatizing attitudes and beliefs held by students.** Limited research exists as to whether graduate students have stigmatizing attitudes, beliefs, and behaviors toward mental illness. Stigma in students is particularly important because they are receiving education and training that could help eliminate or prevent stigmatizing attitudes, beliefs, and behaviors. Moreover, they are the future professionals who will provide treatment to stigmatized groups.

Researchers used a questionnaire to study the attitudes and opinions of doctors and medical students regarding psychiatric illness. Based on 520 questionnaires, more than 50% of the sample believed that individuals who have a drug and alcohol addiction or a schizophrenia diagnosis were dangerous and unpredictable (Mukherjee, Fialho, Wijetunge, Checinski, & Surgenor, 2002). Conversely, the study participants endorsed more optimistic attitudes regarding treatment course than the general public. Additionally, the research findings showed that stigma decreased as experience increased (Mukherjee et al., 2002). Based on these findings, the researchers concluded that early and improved education and additional exposure to mental illnesses could reduce stigmatizing attitudes.

A similar study compared attitudes toward mental illnesses endorsed by doctors and medical students in Sri Lanka and the United Kingdom (Fernando, Deane, & McLeod, 2010). The most salient finding was that the Sri Lankan sample endorsed stigmatizing attitudes toward various mental illnesses (schizophrenia, depression, panic disorder, dementia, and drug and alcohol addiction) and were prone to attribute blame to patients for their conditions (Fernando et al., 2010). The researchers believed that the stigmatizing attitudes would decrease if the medical students had contact with recovered patients in psychiatric settings.

More research about stigmatizing attitudes and beliefs is needed in student populations to ensure that these can be addressed in training. Additionally, research on stigma against people with mental illnesses has largely ignored personality disorders.

**Stigma toward personality disorders.** Stigma toward personality disorders has received less attention by mental health professionals and researchers than other mental

disorders such as schizophrenia or bipolar disorder (Aviram et al., 2006). Despite limited acknowledgment, individuals with personality disorders are often stigmatized in treatment settings by treating professionals and staff. Beales (2001) warned that overlooking stigma toward personality disorders risks maintaining the negative perceptions that mental health professionals have toward these individuals. In one study, a sample of psychiatrists was given various semantic-differential scales and a case vignette to indicate likely management of and attitudes toward the patient (Lewis & Appleby, 1988). The findings indicated that patients with personality disorder diagnoses were viewed as more difficult and less deserving of care than individuals who were not previously diagnosed with a personality disorder. The individuals diagnosed with personality disorders were also viewed as annoying, manipulative, attention-seeking, and as having control over their suicidal urges (Lewis & Appleby, 1988). The researchers suggested that the concept of personality disorders results in persistent negative judgments of patients rather than clinical diagnoses and, therefore, the concept of personality disorders should be abandoned (Lewis & Appleby, 1988).

Although several proposed revisions were drafted, the criteria and terminology used in the *DSM-5* has been left relatively unchanged from the *DSM-IV-TR* (APA, 2013). Nevertheless, a new personality model was introduced in the *DSM-5*'s Section III, which allows clinicians to assess and diagnose a personality disorder based on the individual's specific impairments in personality functioning and on individual patterns of pathological traits (APA, 2013). This approach is dimensional-categorical, as it allows the clinician to note the severity of impairment and problematic personality traits. Although this alternative approach attempts to make the assessment and diagnosis of personality

disorders more individualized, it does not address the stigma that is attached to the concept of personality disorders.

Snowden and Kane (2003) stated that these individuals continue to experience blame for their condition. Individuals with a personality disorder experience prejudice by professional staff and, consequently, often receive unhelpful treatment approaches. In addition, personality disorders sometimes are associated inaccurately with violence toward others (Snowden & Kane, 2003). Both patients as well as professionals describe “personality disorder” as a “very sticky label” (Snowden & Kane, 2003).

**Stigma toward borderline personality disorder.** Mental health professionals in treatment settings are more likely to have negative perceptions and attitudes of those with BPD than of those with other diagnoses (Fraser & Gallop, 1993). Burland (2007) argued that “no serious mental illness is more maligned and misconstrued than BPD.” This may be because the stigma associated with BPD far exceeds stigma associated with other mental illnesses (Aviram et al., 2006).

A study investigated psychiatric nurses’ perspectives of BPD and their relationships with BPD patients. Semi-structured interviews were used to assess the nurses’ experiences with BPD patients. The core theme elicited from the data was titled *destructive whirlwind*. This theme refers to the perception that patients with BPD are a “powerful, dangerous, unrelenting force that leaves a trail of destruction in its wake” (Woollaston & Hixenbaugh, 2008, p. 703-709). Additional themes included *idealized and demonized* and *manipulation and threatening* (Woollaston & Hixenbaugh, 2008). In a similar study, 80% of the participating nurses viewed patients with BPD as more difficult than patients with other diagnoses (James & Cowman, 2007). Overall, the

results revealed that the nurses' experiences with and perceptions of patients with BPD were overwhelmingly negative. This could be attributed to unpleasant interactions with patients and indicative of nurses believing that they lack the skills needed to help this population adequately (Woollaston & Hixenbaugh, 2008). More specifically, 81% of nurses believed that the training that nurses received and care that the patients with BPD received were inadequate to address patients' needs (James & Cowman, 2007).

Additionally, the participants believed that the care provided was inconsistent, patients with BPD were not always told their diagnosis, and that the treatment approaches that were used were over-medicalized (James & Cowman, 2007). Therefore, these studies represent a need to change what services are provided and how they are being delivered to individuals with BPD. The services need to be delivered in a recovery-informed way, and the overreliance on the medicalization of BPD needs to be reduced. Despite the nurses' negative experience with BPD, the data also suggested that the nurses desired to improve their relationships with BPD patients (Woollaston & Hixenbaugh, 2008).

Millar, Gillanders, and Saleem (2012) conducted a study to explore clinical psychologists' experiences and perceptions of patients with BPD. The participants consisted of 16 female clinical psychologists and psychologists-in-training. Of the 16 participants, some were doctoral level students and the others were clinicians. Twelve of these participants had direct experience with an individual suffering from BPD. The 16 participants were divided into four different focus groups that met on one occasion (Millar, Gillanders, & Saleem, 2012). The qualitative analysis revealed eight themes: negative perceptions of the client, undesirable feelings in the psychologist, positive perceptions of the client, desirable feelings in the psychologist, awareness of negativity,

trying to make sense of the chaos, working in contrast to the system, and improving the psychologist's role (Millar et al., 2012). Negative perceptions of the client included viewing him or her as different, odd, controlling, manipulative, over-the-top, and/or limited in the ability to change (Millar et al., 2012). The participants' undesirable feelings included anxiety, low self-efficacy, pressure to do something, and feeling confused, frustrated, and/or overwhelmed (Millar et al., 2012). In contrast, participants also expressed that there is a possibility of change for individuals with BPD. The positive emotions expressed were feelings of empathy, interest, and reward. A theme unique to this study was that the participants were aware of their negative perceptions. They indicated that they often actively avoided being unhelpful or expressing their negative feelings toward their patients. They reported making efforts to work on service engagement and providing structure and boundaries. They also demonstrated a desire to learn more and had desires to value their experiences with these patients (Millar et al., 2012). Overall, this study highlights that qualified clinical psychologists and doctoral level students possess stigmatizing attitudes toward individuals with BPD. Nevertheless, it is important to acknowledge that patients with BPD may be a volatile and at times, and are often considered a difficult population for professionals to work with due to the chronic nature of the illness, high parasuicidal behaviors, and failed responses to treatment; however, this cannot impact professionals' service provision because individuals cannot be treated effectively while being blamed for their diagnosis.

In another study, 336 therapists completed questionnaires that evaluated countertransference reactions to vignettes that described patients who had depression, BPD, or schizophrenia (Brody & Farber, 1996). The results revealed that patients with

BPD elicited the highest degree of anger and irritation and the lowest degree of empathy and nurturance (Brody & Farber, 1996). In a another study using similar vignettes, patients who were labeled as BPD evoked more negative responses from the participants than those that were labeled with depression or schizophrenia (Markham & Trower, 2003). The participants were less sympathetic and optimistic toward individuals with BPD. They also believed that individuals with BPD were in control of the challenging behaviors and their causes (Markham & Trower, 2003). The belief that patients with BPD are more in control of their challenging behaviors than other individuals with different diagnoses is consistent with the viewpoint that BPD symptoms are signs of “badness” and moral failing rather than indicative of an underlying illness (Bower, 2013). Moreover, it is unclear whether inadequate training or other factors explain why a limited number of clinicians view BPD as treatable (Bower, 2013). Regardless, these studies highlight that patients with BPD experience the greatest degree of stigmatization when compared to other serious and sometimes pervasive mental disorders such as major depression and schizophrenia. Stigmatizing attitudes and behaviors of treatment providers impact those suffering from BPD negatively.

**Impact of stigma.** Consistent with previous research findings, service users expressed believing that they received less than adequate care based on having a BPD diagnosis (National Institute for Mental Health in England [NIMHE], 2003). Service users also perceived that mental health providers did not consider them to be mentally ill. Additionally, they perceived that they were being blamed for their mental condition (NIMHE, 2003).

As previous research findings demonstrated, the stigma associated with BPD may affect how mental health professionals tolerate and respond to these patients' thoughts, emotional reactions, and behaviors. Mental health professionals may develop preconceptions about patients with BPD, leading to negative expectations throughout treatment (Aviram et al., 2006). The stigma of this disorder could lead the clinician to dismiss or minimize difficulties, limiting the quality of care provided (Aviram et al., 2004). The clinician may focus on problematic behaviors alone, and strengths may be overlooked or overshadowed by such behaviors (Aviram et al., 2004). Additionally, there is evidence that clinicians distance themselves emotionally from patients with BPD, which may be a self-protective response to the emotional demands and characteristics associated with BPD, such as emotional instability and self-injurious behaviors (Aviram et al., 2006). This is particularly problematic with a BPD population because of their sensitivity to abandonment and rejection. For example, if an individual with BPD perceives that the clinician is becoming distant emotionally, the patient may respond by harming himself or herself or withdrawing from treatment. Ultimately, the emotional distancing of the practitioner may trigger additional behaviors in the individual with BPD that confirm the preexisting stigmatizing attitudes toward BPD (Aviram et al., 2006). Nevertheless, the influence of the practitioner's attitude and behaviors, which may have been shaped by stigma, is not typically considered when the patient's symptoms become exacerbated (Aviram et al., 2006). The degree to which stigma influences emotional distancing from the clinician lends to the possibility that BPD stigma could contribute independently to poor treatment outcome within this population of patients (Aviram et al., 2006).

Hinshelwood (1999) elaborated on how practitioners' reactions to difficult patients may influence how patients are treated. With severe personality disorders such as BPD, clinicians tend to withdraw emotionally from the patient and the experience itself (Hinshelwood, 1999). Hinshelwood explained that when clinicians withdraw, they tend to retreat to a scientific attitude. The negative reaction and emotional distancing from the clinician is then given objective scientific justification. Consequently, scientific justifications blind the clinician from the subjective experience of the patient, ultimately making the patient's treatment less individualized (Hinshelwood, 1999).

Stigmatizing attitudes could also lead to less empathetic care, as evidenced in a sample of psychiatric nurses. Researchers evaluated nurses' expressed empathy to hypothetical patients with schizophrenia and BPD by assessing their written responses to hypothetical patient statements (Gallop, Lancee, & Garfinkel, 1989). The findings indicated that the label of BPD was enough to alter the attitudes and behavior of psychiatric nurses. The nurses were less empathetic and emotionally responsive to the statements of patients with BPD. Furthermore, the nurses were more likely to respond in a belittling or contradicting manner to the statements from patients with BPD than the statements from patients with schizophrenia (Gallop et al., 1989). The nature these responses led Gallop, Lancee, and Garfinkel (1989) to suggest that the nurses most likely believed that it was typical and acceptable to discriminate against patients with BPD.

In several research studies, findings revealed that BPD patients were described as manipulative by clinical staff. In Woollaston and Hixenbaugh's (2008) research, the term *manipulative* was used by the nursing staff to refer to dishonesty rather than considering the behaviors to be part of the pathology associated with BPD. Therefore, this could lead

to a perception that BPD patients are disingenuous. The stigma compounded by providers' beliefs of being used or devalued by patients with BPD could undoubtedly influence the quantity and quality of care that these patients receive in treatment settings (Woollaston & Hixenbaugh, 2008).

As many studies refer to negative attitudes toward individuals with BPD, O'Donovan (2007) investigated how the difference between the expected and actual roles of psychiatric nurses led to stigmatizing attitudes toward patients who need high quality of care. The findings showed that nurses saw their role as predominantly medication-focused as opposed to engaging with and understanding the patient in order to develop a therapeutic relationship (O'Donovan, 2007). This prevented them from providing high quality of care because if the patient did not respond well to medication and did not improve, it is likely that the nurses would view BPD as untreatable and begin to retreat from the patient (O'Donovan, 2007). Distancing from patients is one of the many reasons that Linehan (1993) developed the team-based treatment, DBT. A DBT consultation team serves as a resource for treating difficult cases, as it helps with these issues while simultaneously motivating the treating staff to deliver effective treatment and enhances their skills to do so (Linehan Institute Behavioral Tech., 2015). A DBT consultation team is not available in many treatment settings, as many inpatient and outpatient treatment settings have adopted the skills training groups and neglected the importance of the consultation groups in treating the BPD population.

Overall, research findings demonstrate how stigmatizing attitudes and behaviors toward BPD negatively impact the way treatment providers respond, tolerate, and treat individuals with BPD, ultimately affecting the therapeutic relationship. Moreover, a

major factor that predicted treatment dropout was lack of a positive therapeutic relationship in treatment (Barnicot, Katsakou, Maroughka, & Priebe, 2011). Stigma can contribute to poorer treatment outcomes, as the treatment is often less individualized and the providers are less empathetic. Many individuals with BPD that could benefit from mental health treatment choose not to pursue it, fail to fully engage in treatment once it has begun, or drop out because of the stigmatizing attitudes and behaviors that they experience (Corrigan, 2004). The negative impact caused by stigmatizing attitudes and behaviors could be reduced through the implementation of the recovery model.

Katsakou and colleagues (2012) used semi-structured interviews in a qualitative study to explore the personal goals and meaning of recovery in 48 service users with BPD. The participants believed that recovery involved the improvement of symptoms, gaining control over emotions, relationship improvements, developing self-acceptance and self-confidence, and employment (Katsakou et al., 2012). They believed that psychotherapies for BPD focused heavily on certain areas such as self-harming behaviors, emotion regulation, or relationships, often resulting in their goals being neglected by the therapists (Katsakou et al., 2012). The participants felt that full recovery was a distant goal; however, they were optimistic that they could learn to manage their problems effectively and make meaningful progress. Based on these results, it can be hypothesized that patients with BPD who believe in recovery may be more engaged in treatment, have better relationships with their therapists, and have a higher quality of life and positive outcomes than those who do not embrace recovery-oriented thinking.

### **Recovery Movement**

The recovery movement is a transformation of systems from a disease-oriented perspective to an approach that is collaborative and autonomy-enhancing. The recovery movement represents a cultural shift in the delivery of services because it provides an opportunity to discard practices that may inadvertently hinder an individual's ability to realize his or her potential in various areas of his or her life (Sowers, 2005). If people become ill or break down, it is logical that they can also overcome their difficulties and recover (Turner-Crowson & Wallcraft, 2002). Recovery in this sense can be defined as "overcoming the effects of being seriously mentally ill, in order to retain or resume some degree of control over their own lives" (Jacobson & Greenley, 2001). Nevertheless, mental health providers often do not emphasize such positive possibilities for those who suffer from the most severe diagnoses. Instead, mental health services often focus on the reduction of symptoms rather than on recovery (Turner-Crowson & Wallcraft, 2002). Therefore, it is common for patients to report that having a psychiatric label has severely impaired their efforts to lead lives that they consider to be enjoyable and worthwhile (Turner-Crowson & Wallcraft, 2002).

The concept of recovery in mental health has been widely discussed for approximately two decades (Onken, Craig, Ridgway, Ralph, & Cook, 2007). In the last decade, several mental health organizations provided public education and participated in political lobbying to advocate for changes in service delivery while illustrating effectively that recovery from a serious mental illness is possible and attainable (Bellack, 2006). Additionally, they argued that recovery is drastically different from the disease-oriented model of treatment. The efforts of these organizations and of many individuals

led to two reports from the United States federal government that gave significant momentum to the recovery movement (Bellack, 2006). In the first report on mental health, the surgeon general concluded that mental health services should promote recovery as its primary aim in treatment (US Public Health Service, Office of the Surgeon General, 1999). The second report, the President's New Freedom Commission, detailed a vision statement that included a future where everyone with a mental illness will recover. It stated that transforming the mental health system depended on treatment that focused on enhancing the mentally ill individual's ability to cope with problems and challenges, facilitating recovery, and building resilience as opposed to symptom management (New Freedom Commission on Mental Health, 2003).

Since then, many researchers and clinicians have defined recovery; however, few attempts have been made to develop a consensus about what recovery is or should entail. Nonetheless, embedded in the concept of recovery is the process of change (Onken et al., 2007). Recovery can be described as a multidimensional, complex, fluid, nonlinear process where an individual confronts problems, overcome symptoms, and gains mastery over the illness (Onken et al., 2007). Recovery has a subjective, nonlinear, and experiential quality, and an individual may make progress, lose ground, and begin to make progress again. Mental health stigma marginalizes those who suffer from a severe mental illness, thus creating a host of barriers to a successful recovery (Markowitz, 2001; Smith, 2000). Therefore, the recovery process not only promotes person-centered elements of recovery, but also emphasizes social inclusion and the importance of meaningful roles within the community for those suffering from a serious mental illness (Markowitz, 2001; Smith, 2000).

The concept of recovery represents a model of care that includes both internal and external conditions. Internal conditions refer to attitudes and processes that will lead to change and include the following principles: (a) hope that recovery is possible, (b) healing or, more specifically, developing a sense of self separate from the pathology, (c) empowerment, which provides sense of power and independence, and (d) connection, which entails reestablishing social connections with others (Jacobson & Greenley, 2001). External conditions refer to experiences and practices that will lead to recovery and include the following notions: (a) human rights, which entail fighting mental health stigma and promoting interpersonal support, (b) a culture that fosters respect, growth, and hope, and (c) recovery-oriented services that incorporate hope and empowerment in a collaborative relationship with the provider (Jacobson & Greenley, 2001).

Person-centered elements of recovery include gaining meaning, purpose, hope, self-determination, agency, awareness, potentiality, optimism about outcome, and individual choice that could extend to the individual's interactions with the public, family, and mental health providers (Onken, Dumont, Ridgway, Dornan, & Ralph, 2002). The recovery model includes the person's subjective evaluation of functioning, and satisfaction with life (Bellack, 2006). These elements serve as a cornerstone of the recovery process that must be infused into the individual's life in order to engage in the course to recovery (Onken et al., 2007). Furthermore, a review of literature revealed that a growing body of research supports optimism about recovery, finding productive roles in society, and empowerment as important components of the recovery process (Warner, 2009).

Recovery thinking has generated ideas that transformed beliefs, values, practices, and terminology. In a recovery-oriented approach, mental health professionals work collaboratively with patients. The therapist creates a collaborative atmosphere and instills hope, optimism, and the belief that recovery is possible and attainable (National Institute for Health and Care Excellence, 2009). A longitudinal study assessed whether a recovery-oriented approach was effective with individuals suffering from serious mental illness in a large community psychiatric rehabilitation. The participants in the evaluation included 627 residents and 490 staff members (Malinovsky et al., 2013). The researchers found that recovery-oriented treatment had a positive impact on the therapeutic alliance, rates of overnight hospitalizations, patients' ability to be productive in society, and professional skills of employees (Malinovsky et al., 2013). These results indicate that recovery-oriented treatment is not only cost-efficient but an effective alternative to other mental health treatment approaches. Moreover, the recovery model could be integrated with other evidence-based practices to establish a higher quality of care (Frese, Stanley, Kress, & Vogel-Scibilia, 2001).

In recent years, there has been growing recognition, promotion, emphasis, and incorporation of recovery-oriented practices in mental health care settings (Mabe, Ahmed, Duncan, Fenley, & Buckley, 2014). Several training initiatives and procedural changes were developed in hospitals to further promote recovery-oriented treatment. Nevertheless, there is a lack of initiatives to educate doctoral level psychologists and physicians in the concepts that make care recovery-oriented (Mabe et al., 2014).

**Knowledge of and beliefs in recovery.** It is evident that stigma toward BPD exists among mental health professionals. A cross-sectional study assessed medical

students' attitudes toward mentally ill patients using a questionnaire (Kuhnigk et al., 2009). Findings from this study led the authors to conclude that educational programs play a role in the attitudes that students develop toward mental illness (Kuhnigk et al., 2009). Graduate school serves as the main training ground for future psychologists and other mental health professionals (Peebles et al., 2009). Therefore, it influences the development of future goals and beliefs greatly (Baxter et al., 2001; Kuhnigk et al., 2009). Although the recovery movement has led to the development and implementation of educational trainings and curricula to further the recovery-oriented care transformation, the available training has not yet been tailored to fit the educational needs of doctoral level psychology students in a systematic manner (Peebles et al., 2009).

Intertwining the recovery model into the already established doctoral level psychology curricula could yield positive outcomes. A study assessed medical students' knowledge of recovery from mental illness (Feeney, Jordan, & McCarron, 2013). For 6 weeks, the students were placed in either a recovery-focused training site or a traditional training site. Their knowledge of recovery and attitudes toward mental illness were assessed using the Recovery Knowledge Inventory before and after the training site placement (Feeney et al., 2013). The findings revealed that recovery teaching not only increased students' recovery knowledge, but also led to more positive attitudes and greater optimism toward individuals' recovery in contrast to those who were in the traditional placement (Feeney et al., 2013). In a similar study, it was found that the participants' skills, knowledge, and attitudes toward recovery were more positive after recovery teaching (Higgins et al., 2012).

**Recovery model and stigma reduction.** Research has shown how stigmatizing attitudes and beliefs toward BPD could significantly influence the way patients with BPD are treated by providers, and affect the therapeutic relationship and treatment outcomes. When a treatment provider engages in recovery-oriented thinking that includes the belief that recovery from BPD is possible and attainable, stigmatizing attitudes and behaviors are reduced (Warner, 2009). Thackeray and colleagues (2011) attested that the belief that individuals with mental illnesses can and do recover is key to reducing stigma. A combination of exposure to personal stories of individuals leading productive and fulfilling lives with mental illnesses and the adoption of the recovery model in treatment settings are thought to be the best strategies to reduce stigma (Thackeray, Keller, Heilbronner, & Dellinger, 2011). Additionally, recovery-oriented thinking and care reduces stigmatizing attitudes that individuals with mental illnesses have internalized (Sibitz, Provaznikova, Lipp, Lakeman, & Amering, 2013).

As discussed previously, stigmatizing attitudes can result in the therapist distancing himself or herself from a patient with BPD (Aviram et al., 2006). The relationship between the level of stigmatizing attitudes, social distancing, and belief in recovery was explored in 1,437 adults (Barczyk, 2015). The findings indicated that belief in recovery from a mental illness led to lower levels of social distancing (Barczyk, 2015). These results could be generalized to psychologists and doctoral level psychology students because the researchers did not separate the sample by profession type or exclude mental health professionals from the sample. The researcher concluded that stigma reducing strategies need to emphasize the probability of recovering from mental

illness in order to decrease social distancing and to enhance the therapeutic alliance (Barczyk, 2015).

The therapeutic alliance is an important part of treatment, especially for patients with BPD because of their issues with abandonment and rejection. The therapeutic alliance is associated with positive treatment outcomes (Martin, Garske, & Davis, 2000). When individuals have positive treatment experiences, they are more likely to engage in treatment (NIMHE, 2003). Research has demonstrated that stigmatizing attitudes and behaviors are detrimental to the therapeutic relationship (Barnicot et al., 2011; O'Donovan, 2007). In one study, measures were given to 61 individuals with serious mental illness on two separate occasions to assess the relationship between the working alliance and recovery (Hicks, Deane, & Crowe, 2012). Not only do the findings suggest that the alliance is an important part of recovery, but that recovery-oriented care impacts the working alliance as well (Hicks et al., 2012). This is consistent with Malinovsky and colleagues' (2013) findings that recovery-oriented care had a positive effect on the therapeutic alliance. A positive working alliance is more likely when stigma is reduced.

Overall, the reduction of stigma that occurs from the knowledge of and belief in recovery and recovery-oriented practices leads to better treatment outcomes. Treatment outcome and relationships with recovery beliefs was investigated in a study of 159 participants with a serious mental illness receiving treatment at a community mental health agency. Variables assessed included recovery status, perceived recovery-oriented service quality, social support, and psychiatric symptoms through self-report surveys (Chang, Heller, Pickett, & Chen, 2013). The findings indicated that perceived recovery-oriented service quality and increased social support influenced recovery. Additionally,

individuals experienced symptom reduction when they were treated differently (Chang et al., 2013). Another study was designed to examine the relationship between recovery-oriented care and outcomes with a population of individuals with serious mental illnesses using ratings from the patient, family, and staff (Kidd et al., 2011). A significant relationship was found between recovery-oriented services and better outcomes. The improved outcomes were in the domains of hospitalization days, education involvement, legal involvement, and employment (Kidd et al., 2011).

Although the stigma toward BPD receives less attention than stigma toward other mental illnesses such as schizophrenia, it is one of the most stigmatized and misconstrued mental conditions (Burland, 2007). The stigmatization that individuals with BPD experience affects the level and quality of care they receive as well as the therapeutic alliance, leading to poorer treatment outcomes or service dropout. Recovery-oriented knowledge, beliefs, and services reduce stigma, allowing for better treatment quality, improved therapeutic alliances, and better outcomes. Interestingly, the research assessing the impact of recovery-oriented knowledge, beliefs, and services on stigma, therapeutic alliance, and treatment outcomes focuses predominantly on serious mental illnesses and fails to reveal diagnosis-specific results. Therefore, this study questions whether recovery knowledge moderates the relationship between diagnoses and stigma.

### Chapter 3: Hypotheses

#### Research Question

Does recovery knowledge moderate the relationship between diagnoses and stigma?

#### Hypotheses

**Hypothesis 1.** BPD will be rated as significantly more stigmatized in comparison to MDD and GAD.

**Hypothesis 2.** There will be a significant difference between individuals with high and low recovery knowledge in their stigma ratings.

**Hypothesis 3.** For patients with BPD, the difference in stigma between respondents with low versus high recovery knowledge will be more significant than this difference for MDD and GAD.

**Hypothesis 4.** Respondents who have had training in DBT will have lower stigma ratings than those who do not have DBT training.

## **Chapter 4: Method**

### **Research Design**

This between-groups design employed a quasi-experimental design because this study was designed to examine differences between distinct levels of recovery knowledge and different diagnosis on expressed stigma. Separate vignettes illustrated diagnoses of generalized anxiety disorder (GAD), major depressive disorder (MDD), and borderline personality disorder (BPD). The independent variables in hypotheses 1 through 3 were the level of recovery knowledge (low, medium, high) and diagnosis and the dependent variable was the level of stigma. For hypothesis 4, the independent variable was training in DBT and the dependent variable was the level of stigma.

### **Participants**

Participants consisted of 287 students who met the inclusion criteria that required participants to be at least 18 years old in an APA-accredited doctoral (Ph.D. or Psy.D.) program in clinical or counseling psychology at the time of participation. Students from all other program types including school psychology or non-APA accredited were excluded from participating. Of the 287 students, 82% (234) were enrolled in a clinical psychology program and 18% (53) were enrolled in a counseling psychology program. Additionally, 48% (139) of participants anticipated obtaining a Ph.D. and 52% (148) anticipated obtaining a Psy.D. The participants ranged between being in their first and seventh year in their programs, with 25% (73) in their first year, 19% (54) in their fourth year, 17% (50) in their second year, 16% (45) in their third year, 15% (42) in their fifth year, and the remainder of the participants were in their sixth or seventh year. Of the theoretical orientation choices provided on the questionnaire, 54% (156) identified as

CBT-oriented, 14% (40) identified as having a psychodynamic orientation, 7% (20) identified as having a humanistic orientation, 2% (7) identified with a family systems approach, and 20% (66) identified as “other,” which included mostly an integration of several theoretical orientations.

Additionally, the participants differed in amount of clinical experience, years of clinical training, exposure to BPD, and graduate course work. The participants’ years of clinical experience through training and employment involving direct work with patients varied between 0 to 20 years or more. More specifically, 29% had more than 4 years, 22% had 3 years, 15% had 2 years, 14% had 1 year, 12% had 4 years, and 7% did not have any clinical experience. The participants also differed between the amount of years of clinical training they had in their doctoral program with 21% (61) having 2 years, 18% (51) having 3 years, 17% (49) having less than 1 year, and 14% (39) reporting no clinical training. Half of the participants (50%) had worked with a patient diagnosed with BPD, whereas 33% had not. Furthermore, 11% believed that they had worked with a patient who had undiagnosed BPD and 4% were unsure if they had worked with a patient with BPD. There were 188 participants who were either diagnosed with a mental illness or have a family member or close friend diagnosed with a mental illness, whereas 73 participants did not, 12 were unsure, and 9 did not disclose.

Regarding graduate course work and training, 20% (58) had a graduate course in DBT whereas 78% (224) did not, and 33% (96) had a training in DBT whereas 65% (187) did not. A total of 88% (254) indicated that they had a graduate course on or classes that included discussion of personality disorders and 10% (29) indicated that they did not. The mental health system transformation toward the recovery model has been

occurring in many cities and states; however, only 15% (43) had a graduate course on the recovery movement/model and 83% (240) did not. Likewise, only 19% (55) had training on the recovery movement/model and 79% (228) did not.

The age of participants ranged from 20 to 60 years old. Most frequently, 57% (166) of participants were between 25 and 29 years of age, 17% (48) were between 20 and 24 years of age, and 16% (47) were between 30- and 34 years of age. The sample was composed of 79% (228) females, 18% (52) males, and three participants who identified as transgendered, genderfluid, or genderqueer. There was a wide range of ethnicity, with 69% Caucasian, 8% Asian/Pacific Islander, 6% Multiracial, 6% Black or African American, 5% Hispanic or Latino, and less than 5% Native American, American Indian, or Middle Eastern. The geographic location of the participants varied between 29 of the 50 states, with the most participants attending school in Pennsylvania (22%), Illinois (10%), Indiana (8%), Virginia (6%), California (5%), New York (4%), Colorado (4%), Texas (4%), and Maryland (4%).

### **Recruitment**

Individuals were recruited with an e-mail invitation if they met inclusion criteria (Appendix C), thus making this a non-random sample. The snowballing technique was utilized, as e-mails were sent to randomly selected training and research directors in APA-accredited clinical and counseling psychology doctoral programs across the United States to be forwarded to their doctoral psychology students of the affiliated academic institution.

## Measures

**Recovery Knowledge Inventory.** The Recovery Knowledge Inventory (RKI) is designed to measure knowledge of and attitudes toward recovery among those who study, treat, or will treat mental illness and substance abuse disorders (Bedregal, O'Connell, & Davidson, 2006). It assesses four domains of understanding, including roles and responsibilities in recovery, non-linearity of the recovery process, roles of self-definition and peers in recovery, and expectations regarding recovery. The inventory is a self-report measure and takes approximately five minutes to complete. The inventory consists of 20 items that were developed based on the recovery literature for various substance use and psychiatric disorders (Bedregal et al., 2006). Each item is rated on a five-point Likert scale ranging from 1 to 5 (strongly disagree to strongly agree). Item examples include, "The concept of recovery is equally relevant to all phases of treatment" and "All professionals should encourage clients to take risks in the pursuit of recovery." The scale developers reported a reliability coefficient of  $\alpha = .83$  for the total scale score (Meehan & Glover, 2009). The RKI had a reliability coefficient of  $\alpha = .69$  for the current sample, indicating low reliability.

**Vignettes.** The three vignettes are from two websites and were altered slightly. They are based on diagnostic criteria in the *DSM-5* and describe a fictional individual with a mental disorder. The first vignette described an individual with GAD (Epocrates: An Athenahealth Company, n.d.), The second vignette described an individual with MDD (Kennedy, Hidalgo, & Aggarwal, n.d.), and the third vignette described an individual with BPD (Kennedy et al., n.d.). All other aspects of the vignette were held constant. The vignettes allowed the author to explore the sensitive topic of stigma in a

less threatening way. The vignettes informed the Attribution Questionnaire regarding stigmatizing attitudes and behaviors toward specific disorders. The vignettes took approximately one minute for the participant to read. A licensed psychologist evaluated the vignettes to ensure the accuracy of the symptoms of each disorder.

**Attribution questionnaire.** The Attribution Questionnaire (AQ-27) is designed to measure stigmatizing attitudes toward and discriminatory behavior against individuals with mental illness (Corrigan et al., 2002a). It addresses seven constructs: pity, personal responsibility, anger, helping behavior, dangerousness, fear, and avoidance (Corrigan et al., 2002b). The self-report measure contains 27 questions and takes approximately three minutes to complete. The 27 questions measure stigmatizing attitudes toward and discriminatory behavior against the fictional individual described in the randomly distributed vignette that the participants read prior to taking the AQ-27. Each item is rated on a nine-point Likert scale ranging from 1 to 9 (not at all to very much and not at all responsible to very much responsible). Item examples include, “How likely is it that you would help Harry?” and “If I were an employer, I would interview Harry for a job.” The seven constructs in the measure show high reliability. Literature also shows evidence for construct validity (Link, Yang, Phelan, & Collins, 2004). The AQ-47 had a reliability coefficient of  $\alpha = .77$  for the current sample, indicating fair reliability.

**Demographic questionnaire.** The demographic questionnaire collected information about the participant regarding geographic location, age, gender, ethnicity, theoretical orientation, program type, clinical training, DBT training, professional experience, courses on personality disorders and/or recovery, and whether they, a family member, or close friend is diagnosed with a mental illness (Appendix D).

**Procedure**

An e-mail cover letter was sent to training and research directors of APA-accredited doctoral clinical and counseling psychology programs, as found by searching [www.apa.org/ed/accreditation/programs](http://www.apa.org/ed/accreditation/programs), and was forwarded to doctoral psychology students who met inclusion criteria using e-mail addresses to invite potential participants to participate in the study (Appendix A). The e-mail cover letter provided information about the study, contact information of the principal and student investigator, and a SurveyMonkey.com link that connected the participant to the study. The identity of interested students and participants remained confidential.

Prior to participation, individuals were required to read and understand the participant research information form on the SurveyMonkey.com link (Appendix B). Proceeding to the surveys required participants to indicate that they meet the study's inclusion criteria and have read and understood the terms of participation. Each person was informed that his or her participation was voluntary and that he or she was able to withdraw from the study at any time without consequence. Each student was also informed that his or her participation cannot be linked back to their e-mail address which was encrypted. Additionally, the researchers did not know who had participated in the study, as no direct identifying information was collected on participants in the survey. It was ensured that all information provided willingly remained confidential.

Three surveys were created. Each survey included the RKI, a vignette of one of the three fictional individuals with a mental disorder, the AQ-27, and demographic questions. Once the student read and understood the informed consent form and agreed to participate, he or she was required to complete one survey that had been randomly

distributed. At the start of the survey, the participant first answered the RKI. He or she then read a vignette that described GAD, MDD, or BPD. After reading the vignette, the participant completed the AQ-27 based on the vignette that he or she had read. Lastly, the participant completed the demographic questionnaire. The survey consisted of 66 questions and took approximately five to nine minutes to complete.

The entering of participants' names in a raffle was optional at the end of each survey and available to each participant if he or she was willing to disclose his or her name and contact information; however, the data remained unidentifiable, as the participants' names remained confidential and were not be linked to the survey results or the data. The raffle drawing took place after all data were collected. The raffle was for a \$50 Visa gift certificate. Upon the completion of data collection, the data were put into the Statistical Package for the Social Sciences (SPSS) computer program by the student investigator for statistical analysis to obtain the results. Results were available to participants upon request.

## Chapter 5: Results

Past research was used to determine the desired effect size for this study. Using the alpha level of .05, the sample size for this study was 287 students, which had sufficient power to detect any effects that may exist according to the G\*Power program (Field, 2009). When all data were collected, skewness and kurtosis were checked to determine whether the data were normally distributed. It is important to have normally distributed data because if the data are skewed, it is possible for a type I error to occur, and if kurtosis reveals that the data are in one area, there will be no variability within the data. To satisfy the criteria for univariate normality, the total score of the variable needs to have a value between -2 and +2 for skewness and values between -7 and +7 for kurtosis (Curran, West, & Finch, 1996). The skewness for the total score of provider stigma was .728 and kurtosis was .997. The skewness for the total score of recovery knowledge was .447 and kurtosis was .406. Therefore, the criteria for univariate normality was satisfied.

The goal of the current study was to determine whether recovery knowledge reduced provider stigma toward individuals with BPD. A two-way analysis of variance (ANOVA) was calculated using SPSS to determine whether recovery knowledge moderated the relationship between diagnoses and provider stigma. In this study, recovery knowledge and diagnoses were the independent variables that were hypothesized to affect the dependent variable, provider stigma. The level of recovery knowledge was measured on a continuous scale, but was categorized into three groups (high, medium, low). The diagnoses included were BPD, MDD, and GAD, making this a 3 x 3 between-group factorial design. Factorial ANOVA focuses on the difference in the

means of a single dependent variable when there is more than one independent variable (Hinkle, Wiersma, & Jurs, 2003). A two-way ANOVA was used instead of multiple one-way ANOVAs or multiple t-tests to avoid the risk of committing of a type I error (Hinkle et al., 2003). The ANOVA tested three hypotheses: the main effect of diagnoses, the main effect of recovery knowledge, and the interaction between diagnoses and recovery knowledge on provider stigma.

Hypothesis 1 predicted that BPD would be rated as significantly more stigmatized than MDD and GAD. This hypothesis was partially supported. There was a significant main effect  $F(2,278) = 18.75, p = .000$ , indicating that type of diagnosis affected stigma ratings. The ANOVA does not show which group mean differences resulted in the significance. Therefore, the Tukey HSD post-hoc test was performed after the two-way ANOVA to determine which diagnoses in the sample affected the stigma ratings significantly. BPD ( $M = 70.84, SD = 16.32$ ) was slightly more stigmatized than MDD ( $M = 67.38, SD = 13.73$ ); however, the difference between the stigma ratings of BPD and MD were not statistically significant ( $p = .199$ ). BPD ( $M = 70.84, SD = 16.32$ ) was significantly more ( $p = .000$ ) stigmatized than GAD ( $M = 57.84, SD = 11.97$ ). Additionally, there was a significant difference ( $p = .000$ ) between the stigma ratings of MDD ( $M = 67.38, SD = 13.73$ ) and GAD ( $M = 57.84, SD = 11.97$ ), indicating that MDD was more stigmatized than GAD. Overall, BPD and MDD were more stigmatized than GAD, but there was not a significant difference between BPD and MDD. The means and standard deviations are represented in the Table 1.

**Table 1***Diagnosis*

<b>Diagnoses</b>	<b>Mean</b>	<b>Standard Deviation</b>
BPD	70.84	16.32
MDD	67.38	13.73
GAD	57.84	11.97

Hypothesis 2 predicted that there would be a significant difference between participants with high and low recovery knowledge in their stigma ratings. The amount of recovery knowledge was categorized into three groups: high, medium, and low. The total scores ranged from 51 to 92. There were 13 scores in each of the high, medium, and low categories. Participants with a total score on the RKI that fell between 79 and 92 were categorized in the high recovery knowledge group. Total scores on the RKI that fell between 65 and 78 were categorized in the medium amount of recovery knowledge group, and the low amount of recovery knowledge fell between 51 and 64. This hypothesis was supported. There was a significant main effect  $F(2,278) = 12.36, p = .000$ , indicating that the amount of recovery knowledge participants had affected their stigma ratings. The Tukey HSD post-hoc test was performed after the two-way ANOVA to determine how the level of recovery knowledge affected the stigma ratings. Participants who had low amount of recovery knowledge ( $M = 60.68, SD = 2.58$ ) had higher stigma ratings than participants who had a medium amount of recovery knowledge ( $M = 70.40, SD = 3.39$ ); however, the difference between the low and medium recovery

knowledge groups was not statistically significant ( $p = .080$ ). Interestingly, participants who had a low ( $M = 60.68, SD = 2.58, p = .000$ ) or medium ( $M = 70.40, SD = 3.39, p = .003$ ) amount of recovery knowledge had statistically significant higher stigma ratings than participants who had a high amount of recovery knowledge ( $M = 83.09, SD = 3.54$ ). Overall, participants who had a high amount of recovery knowledge had lower stigma ratings. The diagnosis type and amount of recovery knowledge each affected stigma ratings independently and significantly as evidenced by the main effects. The means and standard deviations are represented in the Table 2.

**Table 2**

*Recovery Knowledge*

<b>Recovery Level</b>	<b>Mean</b>	<b>Standard Deviation</b>
Low	60.68	2.58
Med	70.40	3.39
High	83.09	3.54

Hypothesis 3, which predicted that the difference in stigma between respondents with low versus high recovery knowledge would be more significant for BPD patients than the difference between low versus high recovery knowledge for MDD and/or GAD was not supported. There was no main interaction, indicating that recovery knowledge

does not moderate the relationship between diagnosis and provider stigma ( $p = .243$ ).

The results of the ANOVA are listed in Table 3.

**Table 3**

*Analysis of Variance (ANOVA) Between Recovery Knowledge and Diagnosis on Stigma*

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig</i>
Recovery	4529.53	2	2264.77	12.36	.000
Diagnoses	6872.55	2	3436.27	18.75	.000
Recovery	1008.18	4	252.04	1.38	.243

\* Diagnoses

Hypothesis 4 predicted that respondents who have had training in DBT would have lower stigma ratings than those who have not. A simple linear regression was calculated using SPSS to determine whether participants who had DBT training had lower stigma ratings. A simple linear regression was used to explain the relationship between DBT training and stigmatization toward individuals with BPD because there is one independent variable and one dependent variable (Statistics Solutions, n.d.). The simple linear regression was not statistically significant ( $F(1,281) = .772, p = .381R^2 = .003$ ), indicating that training in DBT ( $M = 1.66, SD = .47$ ) did not have an effect on stigma ratings ( $M = 64.99, SD = 15.14$ ). Therefore, this hypothesis was not supported.

Overall, it can be concluded that BPD is highly stigmatized by doctoral level psychology students, which is congruent with previous research that has demonstrated that mental health providers stigmatize BPD. Although recovery knowledge does not moderate the relationship between diagnosis and stigma, doctoral students who have a high amount of recovery knowledge tend to have less stigmatizing beliefs and attitudes in general.

Additionally, training in DBT does not influence the stigma ratings. The limitations of this study are explored, as they may have influenced the findings of this study.

### Chapter 6: Discussion

It was unexpected that Hypothesis 1, which predicted that BPD would be rated as significantly more stigmatized than MDD and GAD was only partially supported. BPD and MDD were more stigmatized than GAD; however, there was no significant difference between the stigmatizing attitudes and beliefs towards BPD and MDD. Since the stigma ratings were supposed to be based on the vignettes that described either BPD, MDD, or GAD, it is unclear whether participants recognized which disorder was being described, resulting in the stigma ratings potentially based solely on the participants' perception of the disorder being represented in the description provided in each vignette rather than based on the actual description. Depending on how the participants came to their stigma ratings could affect the stigma ratings itself.

In the BPD and MDD vignette, both individuals were brought to the emergency room, whereas the individual with GAD was brought to a primary care physician. In the MDD vignette, the individual was described as a college student who had not left her dorm room, which was in disarray, in 2 weeks. She stopped going to social events and had declining grades. In the BPD vignette, the individual had recently cut her wrists after an argument with her mother, had not been going to school, was not eating well, and was crying a lot for the last 2 weeks after a breakup with her boyfriend. It is possible that the participants viewed these symptomology presentations as severe, and may have felt less confident in their ability to help an individual with these symptomology presentations, resulting in higher stigma ratings. In the GAD vignette, the physical symptoms associated with anxiety (chronic fatigue, decreased sleep, muscle tension, and tension headaches) were highlighted more than physical symptoms associated with BPD or MDD

were described in those vignettes. Somatic symptoms may be more accepted by society rather than cognitive symptoms or mood disturbances, as many people may be able to relate to having experienced anxiety, specifically the physical symptoms of anxiety, ultimately resulting in lower stigma ratings than BPD or MDD. Furthermore, previous research demonstrated that different diagnostic labels trigger different sets of beliefs, contributing to stigmatizing attitudes and behaviors. Stigma may serve different social functions depending on the symptomatology, presentation, and public perception of the illness (Schulze, Janeiro, & Kiss, 2011).

As predicted, the BPD vignette generated high stigma ratings and GAD generated low stigma ratings. Most interestingly, the MDD vignette produced high stigma ratings when it was predicted that it would predict low stigma ratings. The sample in this current study is restricted to doctoral level psychology students, who are knowledgeable about various aspects of many mental disorders. It is likely that the participants were aware that depression is often associated with feelings of hopelessness and helplessness, and may often be coupled with suicidal ideation, gestures, or attempts. Additionally, depression is observed commonly in other diagnoses, such as bipolar disorder, schizoaffective disorder, and some personality disorders. Because depression is associated with certain symptomology that may be viewed as difficult to treat or is observed in other stigmatized disorders, it may have influenced the stigma ratings of MDD among this sample.

Research supports that although depression is common, individuals diagnosed with MDD face stigmatizing attitudes, beliefs, opinions, and behaviors. Using a depression vignette and questionnaires in a cross-sectional study in Brazil, individuals

with depression were perceived by participants as potentially dangerous, and capable of arousing negative reactions and discrimination in society (Toledo Piza Peluso & Blay, 2009). Another cross-sectional study that used a depression vignette and stigma questionnaires in Alberta, Canada found that participants perceived individuals with depression as unpredictable and dangerous (Cook & Wang, 2010). Interestingly, authors of another study examined responses and reactions to vignettes in mental health modules of the 1996 and 2006 General Social Survey. Each vignette described schizophrenia, depression, or alcohol dependence. In 2006, approximately 67% of society attributed the symptoms of depression to neurobiological causes; however, social distance and perceived danger associated with individuals with depression did not decrease among the participants. The authors concluded that although holding a neurobiological conception of the depression increased support for treatment, it was unrelated to stigma (Pescosolido et al., 2010). Although these studies vary in methodology and participant demographics, they each illustrate that depression is stigmatized.

Hypothesis 2 predicted that there would be a significant difference between individuals with high and low recovery knowledge in their stigma ratings was supported. Participants who had a high amount of recovery knowledge had lower stigma ratings than participants who had a low amount of recovery knowledge. This finding supports research suggesting that recovery knowledge reduces stigma. Recovery-oriented thinking, including beliefs that recovery is possible and attainable and that individuals do recover, reduces stigmatizing attitudes, beliefs, and behaviors toward individuals with BPD (Thackeray et al., 2011; Warner, 2009). Barczyk (2015) concluded that emphasizing the probability of recovering from mental illness would reduce stigma,

decrease social distancing, and enhance the therapeutic alliance. Within the recovery movement, the concept of recovery includes the nonlinear process of change that involves overcoming symptoms and gaining mastery over the illness, and a culture that fosters social inclusion, hope, empowerment, choice, respect, growth, and a collaborative relationship with treatment providers (Jacobson & Greenley, 2001; Markowitz, 2001; Onken et al., 2007; Smith, 2000). It is possible that the participants in this study who were considered to have high recovery knowledge participate in recovery-oriented thinking toward those with BPD. Being respectful and hopeful toward those with BPD and understanding that recovery is a nonlinear process may maintain the belief that recovery is possible and attainable. This may allow the doctoral student to separate his or her view of the individual from the pathology, thus resulting in lower stigma ratings.

Hypothesis 3 predicted that for patients with BPD, the difference in stigma between participants with low versus high recovery would be more significant than the difference for MDD and GAD. This hypothesis was generated based on the prediction that BPD is more stigmatized than MDD and GAD, and high recovery knowledge reduces stigma. Therefore, it was predicted that there would be a larger gap between the BPD stigma ratings of high versus low recovery knowledge compared to the stigma ratings of high versus low recovery knowledge in the MDD and GAD groups; however, this hypothesis was not supported. Recovery knowledge does not moderate the relationship between diagnosis type and stigma ratings. Although 88% of the sample indicated that they had a graduate course on personality disorders, there may have been limited discussion in participants' doctoral programs about the characteristics of BPD and/or how to treat it. In general, lack of knowledge about or exposure to a disorder may

lead to stigmatizing beliefs, attitudes, and behaviors toward that disorder. Additionally, most of the sample reported that they had 3 years of clinical training in their doctoral programs thus far. Only 50% of the respondents indicated that they had worked with an individual diagnosed with BPD, and 15% believed that they worked with an individual that had undiagnosed BPD or were unsure if they had ever worked with an individual with BPD. The lack of exposure and/or experience treating BPD may have contributed to the high stigma ratings of BPD, ultimately resulting in the BPD stigma ratings between low versus high recovery knowledge to not be significantly different from the stigma ratings between low versus high recovery knowledge toward MDD and GAD.

Interestingly, only 19% of the sample had training on the recovery model/movement and merely 15% had a course on the recovery model. It is possible that, overall, participants lack knowledge about the recovery model and its principals, resulting in minimal differences between low versus high recovery knowledge on stigma ratings regardless of diagnosis type. It is also possible that students do not readily utilize recovery-oriented thinking when faced with diagnostic presentations that appear severe or hard to manage, regardless of actual diagnosis. Additionally, the participants who were categorized in the high recovery knowledge group obtained RKI scores that ranged from 79 to 92, with the highest possible score being 100. It is possible that this categorization is not a true representation of those who have high recovery knowledge. Furthermore, the RKI yielded low reliability within this sample, suggesting that the RKI may not produce stable results under consistent conditions, ultimately contributing to the absence of an interaction between recovery knowledge and diagnosis type on stigma.

Interestingly, Hypothesis 4, which predicted that respondents who have had training in DBT would have low stigma ratings, was not supported. DBT is delivered typically by highly trained therapists who aim to help patients to manage emotions and change behaviors over the course of a year (O'Connell & Dowling, 2014). DBT is designed to reduce behaviors that are associated with BPD, especially behaviors that are life-threatening, parasuicidal, and interfere with therapy or the individual's quality of life (Linehan et al., 1991). It was predicted that those who had training in DBT would have low stigma ratings due to the intense and in-depth nature of the training that a therapist must endure to deliver DBT properly. It is likely that those who have been trained in DBT have a deeper understanding of BPD and its symptomology. Additionally, DBT has significant empirical support that suggests it is an effective treatment for BPD (Hoffman, 1993; Koons et al., 2001; Linehan et al., 1991; Linehan et al., 2002; Linehan et al., 1993; Linehan et al., 1999; Linehan et al., 1994; Turner, 2000; Verheul et al., 2003).

Interestingly, this finding was inconsistent with similar studies. For example, one study looked at provider stigma toward BPD. The study measured the attitudes and behavioral intentions of healthcare providers toward individuals with BPD after participating in a 3-hour workshop on BPD and DBT (Knaak, Szeto, Fitch, Modgill, & Patten., 2015). The researchers found that the intervention was successful at improving the attitudes and behavioral intentions of the healthcare providers toward individuals with BPD. The current study did not assess participants' knowledge about BPD and/or DBT. Moreover, 78% of the sample in this study did not have a graduate course in DBT and 65% did not have training in DBT. The 35% of participants who received DBT training varied on how much training they received and it is unclear what type of training they received

(single seminar or board certified DBT-Linehan training). Therefore, it is unclear whether how much training and the type of training influenced the stigma ratings.

### **Limitations**

There are several limitations of this study. The sample was mostly Caucasian (69%) females (79%) between the ages of 25 and 29 (57%) in a clinical psychology program (82%) with a CBT orientation (54%), which may have affected the heterogeneity of the sample, ultimately affecting the generalizability. The sample consisted of psychologists-in-training who may have limited experience with BPD. Therefore, the results may not generalize to psychologists with years of experience working with BPD. Further, many students may never train as practicum students or interns in an inpatient facility, which is a setting where an individual with BPD may present for treatment. Additionally, 22% of the participants were from schools in Philadelphia, a city that is advanced in recovery-oriented care. Therefore, this study may have attracted participants who have an interest in the recovery movement.

Using an online survey was necessary to recruit participants from various clinical and counseling psychology doctoral programs across theoretical orientations and geographical regions. Nevertheless, collecting data using surveys on the internet created several limitations for this study. The anonymity of completing internet surveys prevented the investigator from ensuring that each participant was in a clinical or counseling psychology doctoral program. Moreover, internet surveys provide the convenience of being able to be completed anywhere without the investigators present. This may have increased the likelihood that the participant did not answer every item on

each survey. Incomplete surveys led to data errors and, in certain instances, required eliminating participants from the study.

Furthermore, the timeframe of when the surveys were completed may have affected validity, because immediate prior experiences, fatigue, illness, or other extraneous variables may have affected how the participants responded on the surveys. Although the surveys were completed anonymously and the AQ-27 is meant to measure participants' stigmatizing attitudes toward mental illness implicitly instead of explicitly, it is possible that they may not have felt comfortable providing answers that present them in an unfavorable manner. Therefore, the participants may have not felt encouraged to provide honest or accurate answers. Additionally, survey items may have had been interpreted inaccurately, affecting the outcome of the study.

In addition to the use of internet surveys and self-report measures, there were limitations in the methodology of the study. First, this study did not measure the role that the participants' understanding of and experience with BPD played in regard to stigmatizing attitudes and behaviors. This was eliminated from the study to maintain focus on whether recovery knowledge moderated stigma and diagnosis and to keep the surveys short in length. Second, the format of the surveys may have affected the results, as the participants were exposed to the RKI before the vignettes and AQ-27. The recency effect of answering questions about recovery may have influenced the stigma ratings as opposed to participants' actual recovery knowledge. The low reliability of the RKI within this sample may have also affected the outcome of this study.

Another limitation of this study is that it only contained three disorders: BPD, MDD, and GAD. Only a limited number of disorders were needed to test the hypotheses;

however, it would be interesting to examine whether additional disorders, such as schizophrenia or posttraumatic stress disorder would alter the outcomes of the study. Additionally, the three vignettes describing three different diagnoses were from the internet and were altered by the principal and student investigator; therefore, they were not examined for reliability.

### **Future Research and Conclusion**

In conclusion, this study highlights that stigmatizing attitudes and beliefs toward BPD are not only held by the general population, but also among a sample of psychology students in training to become psychologists. Although high recovery knowledge can reduce stigma toward BPD, it does not moderate the relationship between diagnosis and stigma. Future research students should determine what factors contribute to stigmatizing attitudes and behaviors exhibited by clinical and counseling psychology doctoral students. Further, it would be interesting to measure whether students' anxiety and/or the use of coping strategies play a role in whether a student embraces and practices recovery-oriented, collaborative, shared decision-making care with individuals who have highly stigmatized serious mental illnesses. In addition, it would be worthwhile for doctoral programs to measure the effectiveness of introducing ways to become self-aware of one's beliefs toward BPD and how this awareness may affect the therapeutic alliance and stigmatizing attitudes or behaviors toward borderline personality disordered patients. Moreover, examining whether the introduction of anti-stigma lectures that discuss ways to combat stigma toward BPD in doctoral programs may help reduce stigma among psychologists-in-training. Lastly, as recovery-oriented care is being introduced and taught in doctoral psychology programs, it is important to measure what type of programs

and curricula are effective in promoting the application of recovery-informed practice when working with chronic presentations of various mental illnesses.

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## Appendix A

### Recruitment

**E-mail Subject line:** Doctoral student research participation request

**E-mail body:**

Dear Professor,

My name is Danyelle Salpietro and I am currently a 4<sup>th</sup> year student in the Psy.D. Clinical Psychology program at Philadelphia College of Osteopathic Medicine (PCOM). I am currently collecting data for my dissertation about clinical and counseling psychology doctoral students' beliefs about psychopathology and recovery. I am hoping you are willing to help me recruit participants by passing this onto your doctoral psychology students! This is a COMPLETELY anonymous web-based survey and takes approximately **5-9 minutes** to complete. There is an optional raffle which gives the opportunity to win a **\$50 VISA GIFT CARD**!! Your help is greatly appreciated. Here is the link below:

(Eligible participants are clinical and/or counseling psychology students in an APA accredited doctoral program)

Survey Link: [www.surveymonkey.com/r/psychopathologyandrecovery](http://www.surveymonkey.com/r/psychopathologyandrecovery)

Thank you for your help,

Danyelle Salpietro

## **Appendix B**

### **Consent Form**

#### **RESEARCH PURPOSE:**

My name is Danyelle Salpietro, and I am a doctoral candidate in the APA-accredited program in clinical psychology at the Philadelphia College of Osteopathic Medicine (PCOM). Under the supervision of Dr. Bruce Zahn, Professor and Principal Investigator, I am collecting information for my dissertation for which I am surveying doctoral psychology students regarding their beliefs and attitudes about psychopathology and recovery.

#### **ELIGIBILITY TO PARTICIPATE:**

1. You must be 18 years or older
2. You must be enrolled in a clinical, counseling, or combined clinical/counseling APA-accredited doctoral program

#### **DESCRIPTION OF THE RESEARCH:**

You will be asked to complete two surveys and a demographic questionnaire that will take approximately 5-9 minutes in total. The first survey will require you to answer questions about recovery. The second survey will require you to read a vignette and answer questions about psychopathology. Lastly, you will be required to complete a demographic questionnaire.

#### **VOLUNTARY PARTICIPATION:**

Your decision to participate or to not participate does not affect your grades, academic success, or any other aspect of your college and academic career. Your participation in

this study is completely optional and voluntary. You can withdraw from the study at any time without consequence.

**POTENTIAL RISKS:**

There are no identified risks to taking part in this survey. No personal identifying information about you will be collected, as only group data will be reported. You may skip questions or stop the survey at any time.

**POTENTIAL BENEFITS:**

Although you may not receive a direct benefit, you might find this experience both interesting and enlightening, as it may provide insight into your own attitudes and beliefs about recovery and psychopathology. Your participation will increase my knowledge of the topic area, skills in research design, and in the collection and analysis of data.

Additionally, this study could help professors and other educators gain awareness of the need and importance of the inclusion of recovery courses and training in doctoral psychology programs.

**COMPENSATION:**

To show my appreciation for your participation, I've included an optional raffle that will give you the opportunity to win a \$50 Visa gift card. Once you complete and submit the survey, you will be given the opportunity to click a link, where you will be asked to give your name and e-mail address. Your contact information will not be linked to your survey answers. Your survey answers will remain anonymous. The winner will be randomly selected. The name will be drawn after all data collection. I will contact you using your provided contact information should you win the raffle.

**IRB APPROVAL:**

This study has been approved by the PCOM Institutional Review Board (#H15-053X). It has been determined that this protocol is exempt from informed consent requirements under 45 CFR 46.101(b)(2) - survey research in which the responses will be recorded in such a manner that the human subjects cannot be identified.

**CONTACT PERSONS:**

If you have any questions, at any time, about this research, please contact principal investigator Dr. Zahn at BruceZ@pcom.edu or the responsible student investigator Danyelle Salpietro at DanyelleSa@pcom.edu.

By clicking "Next" below to proceed with the surveys, you give your voluntary consent to participate in this study.

## Appendix C

### Inclusion/Exclusion Criteria

**1. Are you 18 years old or older?**

Yes

No

**\* 2. What type of doctoral degree will you obtain?**

Ph.D.

Psy.D.

Ed.D.

I am currently not enrolled in a doctoral program

**\* 3. What type of doctoral program are you enrolled in?**

Clinical Psychology

Counseling Psychology

Combined Clinical/Counseling Psychology

I am not enrolled in a Clinical or Counseling Psychology program

**\* 4. Is your program APA accredited?**

Yes

No

**Appendix D**

**Demographic Questionnaire**

**53. How old are you?**

20-24

25-29

30-34

35-39

40-44

45-49

50-54

55-59

60 or above

**\* 54. Please specify your gender.**

Female

Male

Transgender

Other (please specify)

**55. Please specify your ethnicity.**

White or Caucasian

Hispanic or Latino

Black or African American

Native American or American Indian

Asian/Pacific Islander

Arab

Multiracial

Other (please specify)

**\* 56. What city and state do you attend school?**

**\* 57. What year of the program are you in?**

1st

2nd

3rd

4th

5th

6th

7th

**\* 58. What is your theoretical orientation?**

Cognitive-behavioral therapy (CBT)

Psychodynamic

Humanistic

Family Systems

Other (please specify)

**\* 59. How many years of clinical experience of direct work with patients have you had? (in training and employment)**

**\* 60. How many years of clinical training have you had in your doctoral program?**

None yet

Less than 1 year

1

2

3

4

5

6

7

**\* 61. Have you ever worked with a client(s) diagnosed with borderline personality disorder?**

Yes

No

I'm not sure

I believe a client had borderline personality disorder however, he/she was not diagnosed with it

**\* 62. Have you ever had a graduate course on dialectical behavior therapy (DBT)?**

Yes

No

**\* 63. Have you ever had training in DBT?**

Yes

No

If so, how many hours?

**\* 64. Have you ever had a graduate course on personality disorders or that discussed personality disorders?**

Yes

No

**\* 65. Have you ever had a graduate course on the recovery movement/model?**

Yes

No

**\* 66. Have you ever had training on the recovery movement/model?**

Yes

No

If so, how many hours?

**67. Are you, a family member, or a close friend diagnosed with a mental illness?**

Yes

No

I'm not sure

I would rather not say