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School of Occupational Therapy

Title: INSIGHT INTO THE OCCUPATIONAL LIVES OF ADULTS WITH BORDERLINE PERSONALITY DISORDER: A GROUNDED THEORY APPROACH

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A research project submitted in partial fulfillment for the requirements of the Doctor of Occupational Therapy degree from the University of Indianapolis, School of Occupational Therapy.

Under the direction of the research advisor:

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SCHOOL OF OCCUPATIONAL THERAPY

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A Research Paper submitted to Sally Wasmuth, Ph.D.

in partial fulfillment of

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Abstract

Borderline personality disorder (BPD) is characterized by intense emotions, self-harm, low or unstable self-image, and risky behaviors, among other symptoms (American Psychiatric Association, 2013). The purpose of this study was to explore and better understand, through grounded theory analysis, the occupational lives of people with BPD to identify how occupational therapy (OT) may improve occupational lives for this population. There is limited research that specifically focuses on the impact of BPD on occupational participation, which is important for informing OT treatment planning. This study uses a grounded theory design with existing data from a larger study looking at metacognition and function in people with BPD. Eighteen participants were recruited via convenience sampling from a Veteran Affairs Hospital inpatient/outpatient clinic in an urban midwestern area. Data were collected with the Indiana Psychiatric Illness Interview (IPII), a semi-structured interview designed to elicit illness personal narratives (Lysaker & Lysaker, 2002). Eighteen IPII transcripts were analyzed using the grounded theory steps including initial coding, focused coding, axial coding, and theoretical coding (Charmaz, 2014). Findings illustrated a bidirectional interaction between the main themes of occupation and influencing environment. Participants' environments contributed to their chosen occupations, which in turn continued to influence their environments. A bidirectional interaction was also evident between the themes of occupation and internal experiences. Internal experiences contributed to the types of occupations participants chose – feelings of shame and low self-worth, for example, contributed to participation in relationships that reinforced these feelings. Data in this study illustrated a one way interaction between the themes of environment and internal experience. Environmental contexts impacted participants' internal experiences; however, while internal experiences impacted occupational choices which then contributed to shaping participants' environments, internal experiences did not directly shape the environments

of participants. This research highlights how occupational participation can powerfully impact lives of people with BPD. Data illustrated that occupations affected both environmental contexts and internal experiences. Therefore, occupation may be a powerful mechanism of change that affects internal experience and environments. Occupational therapists can build on the findings of this study by helping clients intentionally use occupation to change their experiences related to BPD, including problematic self-image, self-harm, and risky or disaffirming environments.

Introduction

Borderline personality disorder (BPD) impacts people's feelings toward themselves and their relationships with others (American Psychiatric Association, 2013). The Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) states that BPD affects a person's self-esteem, self-image, and personal relationships, and can begin early in life and continue to manifest over time (American Psychiatric Association, 2013). According to the National Alliance on Mental Illness (2017), major symptoms associated with BPD include fear of abandonment, unstable relationships, suicidal thoughts and behavior, impulsive behaviors, and self-image issues.

Rates of self-harm and suicide among people with BPD are alarming. For instance, Matusiewicz and colleagues (2014) found that self-harm and suicidal behavior occurred among 50% to 80% of people diagnosed with BPD. These disquieting numbers demonstrate the negative effects and the serious problem that BPD can have, illustrating a need for better understanding of how these individuals' lives unfold and what factors may contribute to troubling experiences such as self-harm.

The purpose of this study was to explore, through a qualitative, grounded theory analysis, the occupational lives of people with BPD with the aim of identifying potential ways in which occupational therapy could improve occupational lives within this population. In the context of occupational therapy, occupations have been defined as: "The things that people do that occupy their time and attention; meaningful, purposeful activity; the personal activities that individuals choose or need to engage in and the ways in which each individual actually experiences them" (Boyt Schell, Gillen, & Scaffa, 2014a, p. 1237). Our study may reveal ways in which occupations are compromised by BPD, or ways in which aspects of BPD become occupations for

individuals.

Literature Review

History of Borderline Personality Disorder

The term ‘borderline’ was originally used to describe a person with schizophrenia who was near experiencing psychosis (e.g. on the border of being psychotic) (Gunderson, 2009). In the 1970s, BPD was distinguished as its own diagnosis and listed in the DSM-III. However, according to Gunderson (2009), the validity of the diagnosis was questioned due to how similar it was to other mental health illnesses such as depression and schizophrenia. In response, numerous studies were published in the 1980s that began to distinguish BPD from other mental health disorders (Gunderson, 2009). Persons with BPD and schizophrenia can have similarities in how the disorders present, including hallucinations, paranoia, and childhood trauma and emotional abuse (Kingdon, 2010). The disorders may look similar in presentation, but Kingdon (2010) found that people with schizophrenia experience more frequent hallucinations and people with BPD often were subject to more childhood trauma. Both BPD and schizophrenia can affect a person’s sense of self and increase dissociative and emotionally withdrawn actions, but these symptoms are often more pronounced in people with schizophrenia (Reitman, 2013). Some researchers have found that people with schizophrenia tend to have more disturbances with their sense of self than people with BPD and are often more likely to demonstrate an increase in dissociative and emotionally withdrawn actions (Reitman, 2013). Schizophrenia hallucinations are almost always traumatizing to the point of extreme emotional pain and an agonizing internal experience, whereas BPD hallucinations are typically not as intrusive or frequent (Reitman, 2013). Some researchers suggest that the internal experience of people with BPD are typically not quite as negative as those with schizophrenia. A person with BPD may exaggerate their

feelings or have an outburst or shut down and withdraw as someone with schizophrenia would. In both disorders, the emotional experiences can lead to a lack of motivation and emotional regulation (Reitan, 2013).

Signs and Symptoms

As the name suggests, borderline personality disorder entails personality disturbances such as paranoid or narcissistic thoughts and actions. Other symptoms include anger outbursts, manipulation, and anxiety (Stone, 2016). A qualitative study by Pearse and colleagues (2014) examined psychotic symptoms of BPD. Twenty-four of the 30 participants reported experiencing psychotic symptoms at some point in their lifetimes, 18 of which were unrelated to other comorbid disorders. Of these 18, auditory hallucinations were the most common, experienced by 15 participants. Visual hallucinations, delusions, tactile hallucinations, and olfactory hallucinations were also reported but less common. Regarding auditory hallucinations, most voices were reportedly negative and experienced as an internal struggle (Pearse et al., 2014). As previously mentioned, those with BPD are also 40 to 50 times more likely to attempt suicide than the general population (Stone, 2016). In addition, self-harm is commonly seen among patients with BPD (Rossouw & Fonagy, 2012; Stone, 2016). In the DSM-5, there are nine criteria for BPD, and a person must meet five of them in order to be diagnosed. The criteria include:

1. Frantic efforts to avoid real or imaginative abandonment
2. A pattern of unstable or intense interpersonal relationships that fluctuate between extremes of idealization and devaluation
3. Identity disturbance: persistently unstable self-image or sense of self
4. Impulsivity in at least 2 areas that are potentially self-damaging

5. Recurrent suicidal behavior, gestures, threats, or self-mutilating behavior
6. Affective instability due to a marked reactivity of mood
7. Chronic feeling of emptiness
8. Inappropriate, intense anger, and inability to control it
9. Short, stress related paranoid ideation or severe dissociative symptoms (American Psychiatric Association, 2013, p.663)

Most studies have found that by the time a person is in their thirties, the symptoms of BPD have decreased with or without intervention. However, longitudinal studies of people with BPD are rare; comparative intervention studies at a given point in time are much more prevalent in the literature (Stone, 2016).

Comorbidity

Borderline personality disorder commonly co-occurs with other disorders (Kaess et at. 2012). Rates of BPD co-occurring with substance use disorder (SUD) are estimated to be as high as 65% (Pennay et al., 2011). Borderline personality disorder is most commonly found to have comorbidity with Axis I disorders, including mood disorders, substance use disorders, adjustment disorders, dissociative disorders, eating disorders, and other behavioral and emotional disorders than develop in childhood and adolescence (Kaess et al., 2012), with the strongest association with depression and anxiety (Tomko et al., 2014). It is also very common for people with BPD to have comorbid diagnoses with Axis II disorders such as avoidant, dependent, and obsessive-compulsive personality disorders, as well as other personality disorders (Kaess et al., 2014).

Post-Traumatic Stress Disorder. According to Frias and Palmar (2014), people with borderline personality disorder are significantly more likely to also have a diagnosis of post-

traumatic stress disorder (PTSD) than the general population. Comorbid diagnoses of BPD and PTSD amplifies the psychopathological and psychosocial impairments more so than those with a diagnosis of BPD alone. It is possible that these two disorders are commonly found together because of a trauma that happens in childhood during a crucial time of personality development (Frías & Palma, 2014). Boritz and colleagues (2016) found that patients with comorbid BPD and PTSD reported higher psychological distress than participants with BPD before treatment as well as after treatment. This is not to say that the treatment was ineffective, but the distress reported after treatment by those with comorbid BPD and PTSD continued to be higher than those with a diagnosis of BPD alone (Boritz et al., 2016).

Substance Use Disorder. Substance use disorder (SUD) is also frequently found to co-occur with BPD (Kienast et al., 2014). Illustrating this, one group of researchers found that 90% of the participants who had BPD also met the diagnostic criteria for SUD (Zanarini et al., 2011). People with BPD were 21% more likely to develop SUD involving alcohol and 65% more likely to develop SUD involving drugs than people with other Axis II disorders. Substance use disorder is also more likely to be recurring in people with BPD than in people without BPD (Zanarini et al., 2011). It is therefore important for healthcare providers to consider addressing comorbidities with BPD (Kienast et al., 2014).

Interventions for Borderline Personality Disorder

Many interventions have been developed to address the symptoms of BPD. Studies suggest that, while many medications have been developed to address BPD symptoms, medication alone does not help long-term recovery and should be bolstered with other interventions specifically tailored to the person and his or her symptoms (Borderline Personality Disorder, 2016).

Dialectical Behavior Therapy (DBT). Dialectical behavioral therapy (DBT) has been studied extensively and focuses on the relationship between the person and healthcare professional through patient-centered skill-building, psychotherapy and a team approach (Bendics, Comotis, Atkins & Lineham, 2012). It also includes education on balancing life changes, and is typically performed over a one-year period (O'Connell & Dowling, 2014). Dialectical behavioral therapy has been suggested to improve attitudes toward daily experiences (Bendics et al., 2012). Bendics and colleagues compared DBT's effectiveness to treatment as usual (TAU) among 101 white women between the age of 18 and 45 diagnosed with BPD. Participants were randomly assigned to receive TAU or DBT and given self-report surveys to rate their own introject (part of a person's personality that includes self-directed actions), attitude, interdependence, and how their therapists acted towards them. Questions were sorted into eight categories, which included emancipation, affirmation, active love, protection, control, blame, attack, and ignore. This study found that those who participated in DBT experienced an increase in self-affirmation, self-love, and self-protection significantly more than those who received TAU (Bedics et al., 2012).

Emotional Regulation Training (ERT). Another type of therapy that is often used for BPD is emotional regulation training (ERT), which consists of learning techniques to control strong emotions by way of healthy coping skills. Schuppert et al. (2012) compared its effectiveness in 109 mostly female participants ages 14-19 to TAU (which consisted of medication, psychotherapy, and counseling). Emotional regulation training was given for 17 weeks, while TAU was given for 6 months. Post-intervention interviews and questionnaires indicated no significant difference between groups; both groups demonstrated improvements in symptoms such as affective instability, borderline symptoms, and psychopathy. However, at the

12-month follow-up assessment, those who participated in the ERT treatment had a larger improvement from the time their intervention ended, suggesting ERT may facilitate long-term change after treatment has ended. It is important to note, though, that participants in the ERT group who had a history of abuse were less likely to show decreased severity of borderline symptoms and also less likely to improve in their psychopathy after treatment (Schuppert et al., 2012).

Metacognitive Training. Metacognition is, in the most basic form, the ability to think about thinking. Metacognition and social cognition both refer to a person's interaction with others, but metacognition focuses on the person's understanding of the self during these interactions whereas social cognition focuses more on the ability to accurately perform specific tasks in social contexts (Wasmuth, Outcalt, Buck, Leonhardt, Vohs, & Lysaker, 2015). Some scholars have delineated four domains of metacognition (Lysaker & Klion, 2018). The first domain is self-reflectivity and addresses how the client is able to understand their own mental state(s). Understanding others' minds is the second domain and consists of the client's ability to understand the mental experiences of others. The third is decentration and is the ability to entertain other views and perspectives on life events. Mastery, the final domain, is the ability to take the first three domains of metacognition (self-reflectivity, understanding others' minds, and decentracation) and apply them to social and psychological situations (Lysaker & Klion, 2018). Schilling, Moritz, Kother, and Nagel (2015) compared effectiveness of metacognitive training to progressive muscle relaxation (exercises involving tensing and relaxing muscle groups to promote relaxation) and found that metacognitive training was significantly more effective in reducing symptoms of BPD. Participants of the study reported improvements in self-confidence, empathy, taking others' perspectives, and coping. It was also reported that the metacognitive

training was more fun to participate in and encouraged participation more than the progressive muscle relaxation treatment (Schilling et al., 2015).

Borderline Personality Disorder and Illegal Behaviors

One central aspect of BPD is that it often entails risky, impulsive, self-harming behavior. (Dixon-Gordon, Chapman, Weiss & Renthal, 2014). A study of 375 men and women from an outpatient internal medicine clinic for non-emergent medical care by Sansone, Lam, and Wiederman (2012) examined the relationship between BPD and illegal behaviors. They found that younger respondents were more likely to have participated in a number of illegal behaviors, and men more commonly participated than women. The six most common illegal behaviors performed by people with BPD included aggravated assault, simple assault, disorderly conduct, driving under the influence of alcohol or drugs, drug abuse violations, and public drunkenness or intoxication (Sansone et al., 2012).

Another study with the same participants focused on whether people with BPD demonstrated more disruptive behaviors in the medical setting than those without the disorder (Sansone et al., 2011). Researchers found that those with symptoms of BPD were more likely to have partaken in disruptive behavior (82.5%) in a medical setting than those who did not have BPD symptoms (43.7%). They also found that those who did partake in disruptive behaviors were more likely to perform the following specific behaviors: yell, scream and verbally threaten medical care providers, refuse to talk to medical care providers, and talk negatively to medical personnel or family members (Sansone et al., 2011).

Gender Differences in Borderline Personality Disorder

The DSM-5 states that “borderline personality disorder is diagnosed predominantly (about 75%) in females” (American Psychiatric Association, 2013, p. 66). Some have suggested

that the tendency to diagnose more women with BPD than men may indicate a gender bias among clinicians (Sansone & Sansone, 2011). The gender difference in diagnosis may also be due to women being more likely to seek help regarding psychological needs (Skodol & Bender, 2003). Furthermore, women more frequently end up in medical facilities due to self-harm behaviors and are therefore more likely be recruited in studies on BPD (Sansone & Sansone, 2011). Another study suggested that causes of BPD such as abuse, neglect, and internalizing problems are more prevalent among women than men (Skodol & Bender, 2003). This study is unique in that the sample used was comprised of mostly men and therefore adds to the small body of knowledge about men's experience with BPD.

Occupations and Borderline Personality Disorder

Occupational therapy emphasizes the importance of occupational balance. Occupational therapy is defined as "the therapeutic use of everyday life activities (occupations) with individuals or groups for the purpose of enhancing or enabling participation in roles, habits, and routines in home, school, workplace, community, and other settings," (AOTA, 2014). Occupation refers to any meaningful activity, not just the person's vocation. Few studies have examined relationships between occupations and BPD. One study examined the occupation of sleep in patients with BPD, finding people with BPD often have sleep difficulties and/or used sleep to cope with symptoms (Wood et al., 2015). Although sleep is an important occupation for everyone (AOTA, 2014), symptoms of BPD can be amplified by lack of sleep, making it a high priority for those with a diagnosis of BPD. This study found that establishing routines was helpful in developing healthy sleep patterns. However, findings were drawn from a very small sample and are not necessarily generalizable to the wider BPD population (Wood et al., 2015).

Another study found that women with BPD had few organized daily occupations (Falklof

& Haglund, 2010). While this study also had a very small sample, it may offer preliminary insight into the occupational lives of those with BPD. For example, when discussing their lives, participants in this study were much more likely to give examples of incompetence in performance than they were competence in performance. Participants reported that goal setting was viewed negatively because of their failure to accomplish desired occupations. Shame and unhappiness were commonly used to describe how the participants felt when trying to manage their lives (Falkokf & Haglund, 2010). The main themes of women with BPD were found to be positive self-image, self-image problems, and how they viewed their competence in occupational performance. Overall, the study stressed that people suffering from BPD have great problems with their ability to adapt to daily life and organize their daily occupational routine (Falklof & Haglund, 2010).

The limited amount of research on occupations and BPD, as well as the small sample sizes of the few existing studies, illustrates a critical need for more research in this area. This critical need is also demonstrated by the majority of participants being women. The present study addresses this need through qualitative, grounded theory exploration of the occupational lives of people with borderline personality disorder. Such research may help occupational therapists effectively assist clients in their recovery processes.

Methodology

This study used existing data from a larger study looking at metacognition and function in people with BPD. All procedures of this study were approved by the university and Veterans Affairs institutional review board. Participants for this larger study were recruited via clinician referral. To be included in this study participants had to be patients at the VA Medical center, receiving services for BPD. Patients under 18 and pregnant women were excluded.

Participant Characteristics

Participant ages ranged from 26 to 67 and included 18 participants (2 females and 16 males). The ethnicities of the participants are as follows: 72% Caucasian, 22% African American, and 6% Interracial. There were 12 (66.66%) participants who listed alcohol as their preferred substance. Four (22.22%) participants listed cocaine or crack cocaine as a preferred substance. Twelve participants (66.66%) had PTSD, 15(83.33%) had some form of depression, and four participants had Axis III disorders including chronic obstructive pulmonary disease(two participants), pancreatic shock (one participant), and fibromyalgia (one participant).

Measures

This study collected data using the Indiana Psychiatric Illness Interview (IPII). The Indiana Psychiatric Illness Interview (IPII) is a semi-structured interview designed to elicit illness narratives (IPII; Lysaker and Lysaker, 2002). According to Lysaker and Lysaker (2002), the goal of the IPII is "to reopen the novelty and richness of life experience in the context of that person coming to play an active role in interpreting and forging constructions about that experience" (Lysaker and Lysaker, 2002). The IPII consists of four sections that take between 30 and 60 minutes to complete. The first section is a general free narrative. This section allows the individual to discuss their life experiences openly and helps establish rapport with the interviewer. The second section is an illness narrative. This section takes a deeper look into the individual's perceptions of his or her mental illness. The third section evaluates the individual's perception of the illnesses' control on his or her life and how well he or she manages illness. The fourth section examines the individual's thoughts about the future and aims to see what will remain the same and what will change as a result of changing interpersonal and psychological functioning (Roe et al., 2008).

The Metacognition Assessment Scale (MAS-A) is reliable in evaluating and measuring a client's metacognition from an open narrative stated by the participant (Broker, et.al, 2017). The MAS-A is able to separate a person's metacognition into the four separate dimensions including self-reflectivity, understanding others' minds, decentration, and mastery. The MAS-A can determine the client's strengths and weaknesses in regards to their ability to understand their thoughts.

Research Design

This study utilized a grounded theory approach. Grounded theory provides a method for developing theories about the observed world in order to better understand it (Charmaz, 2014). Theories derived from this methodology are meant as a means of interpreting the outside world, not to state absolute fact. The grounded theory process involves using rich qualitative data to identify themes. The grounded theory coding process begins very generally and then gradually becomes increasingly precise (Charmaz, 2014). This research design is appropriate for this study because there is limited research on BPD in the context of occupational therapy.

Data Analysis

Eighteen transcribed and de-identified interviews of veterans with BPD were analyzed by the research team using the following steps outlined by Charmaz (2014).

Initial Coding. The research team first performed line-by-line coding on the first page of one transcript as a group. This involved reading each line of the transcript and assigning a code to each meaningful text unit. This process allows researchers to stay open to the data, and prevents any themes from being overlooked (Charmaz, 2014). After performing line-by-line coding on each page of the first transcript as a group, the researchers established an initial codebook to use when looking at further transcripts, with the knowledge that codes would be

continually edited throughout the data analysis process. The initial codebook was established by examining the line-by-line codes and establishing themes based on these codes.

Focused Coding. During this stage, significant codes identified in initial coding are applied to large amounts of data in order to determine the accuracy of the codes identified. New ideas continue to arise in this process and the codes in this stage are defined as necessary (Charmaz, 2014). As the codes are refined they are applied to previously coded data. To complete focused coding, the research team split into two groups and, using the codebook, coded five transcripts total, coming together after each transcript to discuss the codes as an entire group. During this process, each team read the codes they used for a specific portion of text, and upon agreeing on a code unanimously, it was added to a final version of the transcript. Discrepancies were resolved by consulting with the faculty mentor member of the research team.

Axial Coding. The third step of grounded theory coding is axial coding, which is described as a way of sorting and synthesizing data (Charmaz, 2014). Axial coding is used to help researchers answer questions about the data and begin to understand relationships among the themes (Charmaz, 2014). The research team reviewed all of the coded transcripts in pairs, examining the data for each unique code and looking for themes and sub-themes within each code. This allowed the researchers to gain a better understanding of each code's meaning and the ways in which data for each code presented. Researchers looked for similarities and differences in how data for a specific code presented among individual participants.

Theoretical Coding. The final coding stage of grounded theory is theoretical coding, which is a means of identifying relationships between the codes and is a step beyond axial coding (Charmaz, 2014). The researchers used themes found in focused and axial coding to determine relationships among the main codes. These relationships were then put into a figure in

order to visually demonstrate observed relationships. In this stage of the coding process, some codes were combined, moved, or renamed in order to best describe the data. The findings of theoretical coding sculpted the theory derived from this research.

Trustworthiness. Investigator triangulation was used in this study to increase trustworthiness of findings and methodology. Investigator triangulation involves using two or more researchers in a study to interpret the data in order to minimize biases (Denzin, 1973). This study utilized a primary investigator and four secondary investigators to interpret the data and develop themes throughout the research process.

Findings

This grounded theory analysis resulted in the following main themes: influencing environment, internal experience, and occupation. Each main theme is accompanied by subthemes: being abused, arising problems, feeling neglected, feeling victimized, escape, self-segregating, positive change, participating/engaging, and substance abuse. These themes can be found in figure 1. Below are the descriptions of data contributing to these themes and the resulting theory.

Themes

Influencing Environment. The theme 'influencing environment' describes data revealing the positive and negative ways participants' current lives were shaped by past experiences. Data reflecting a positive environment included references to social environment (family and children), and/or physical home or shelter. For example, one participant noted: "*Um, we were kind of living with my grandparents at the time so I remember a kind of stability there. There was always breakfast. There was always kids to play with um there's toys. It was it was a good place to live."* This excerpt demonstrates how a positive environment produced "stability"

and fulfillment of needs such as food and “kids to play with”. Receiving positive love, attention and help from parents growing up influenced and sometimes counter-acted negative feelings. As one participant recalled:

> *I didn’t have any confidence anymore and my dad spent every night working with me and because math was his big deal we spent a lot of time with math and science. He was chief of training for the fire department and they have to do a lot of math and he would bring their tests home and have me do some of the problems there. He had a way of guiding me to answers…not giving me answers but being a true tutor that helps you see the path to get there. Um…and so he would get really excited, he would say, “oh, Wow! Some of the guys in the class weren’t even able to get this one!” So… probably for that…you know a lot of those reasons that I enjoyed the math and science tremendously.*

Negative environmental influences described problematic family histories leading to current life struggles, or negative military experiences. One participant stated,

> *I remember when I was 10 and they picked my sister up basically for prostitution that uh the judge had ordered her to seek psychiatric counseling and the center she went to, they got ahold of my parents and said they wanted to see the whole family and get all their family in for counseling and my mom and dad refused, and I think partly it was because my mom was afraid that the abuse that she had um I don’t know, I mean it was odd, I don’t remember my sisters going through what I did, but um they could have had it just as but, I don’t remember, but yeah there there was enough abuse by the time I was 10 that didn’t want, she didn’t want anyone going to the counseling talking to anyone about it.*

The impact of negative environmental influences is further described in the following sub-theme.

Being abused. The sub-theme 'being abused' was used when a participant described some form of physical, emotional, psychological, or sexual abuse, including bullying and being unfairly punished or persecuted. Almost all of the abuse that participants described occurred during childhood, and all abusers were authority figures, except instances of 'bullying.' When a participant described being bullied, it was always by peers. All but one described the bullying as happening in childhood, during their school years. One participant described:

> *um there were a group of like 5 kids that I don't know why but they were allowed to pick on me every day on the playground and in class. I remember that whoever would sit behind me used to flick my ears when the teacher wasn't look and they would um actually like hit me on the playground and harass me and torment me every day and that happened every day for 3rd, 4th, 5th, and 6th and um nothing was ever done about it and it was odd.*

The outlier was an instance of being bullied by other soldiers while in the military. This participant said:

> *Um I started getting bullied and like I had never been bullied in my entire life but I really got bullied there. And I couldn't figure out why I was getting bullied but I'm not someone you bully. I've never been someone you bully. I will never confront you head on. I'll never fight you, I'll never go to jail for it. "I was uh, cornered by four of my peers and, during the assault, I had cigarettes extinguished in my eyes."*

The majority of the instances of bullying were manifested through physical bullying, but there were some manifestations of psychological bullying as well through threats, spreading rumors, and being excluded from participating and engaging with peers, such as one participant who tried to join after school curricular activities:

> *I remember walking in on one of those clubs wanting to join and I got locked out. Locked out. And it wasn't like they were being polite locked out it was viciously locked out and that set a tone for me for a long time.*

In all instances of bullying the person felt unwanted by their peers and was afraid to try to connect with peers.

Psychological or emotional abuse, sometimes in the form of neglect occurred in childhood or adolescence and always involved family members. One of the participants said: *"Eleven years old on um…even to this day…it's turned to verbal abuse or criticism, always. Everyone…dad was super critical of everything, especially me and not…never was able to satisfy him… never lived up to any of his expectations."* Another participant described psychological and mental abuse:

> *And this is when the abuse kinda started. Like I don't wanna say it was sometimes it was some sort of physical abuse at that point... He never let us come in the house for dinner. He was like just eat out of the garden it's healthier. And I always thought that was an abusive thing to do but some people don't see it that way… Because he yelled a lot, he was demoralizing, called you fat or worthless or he always for some reason thought I was gonna be gay. He always had that assumption and I just really resent that fact. Um one time he made us sleep outside for an entire week with just a poncho and got fed out the back door. Um, things like that. But that was at this house. That was when things started to really turn for me.*

Multiple participants reported experiencing physical abuse more than once in their life, usually recalling several specific attacks. One participant described:

> *Um when I was younger, or at some point, I think somebody tried to suffocate me because now, I um I don't know if it was once or more than once but I have issues with plastic bags and making sure that plastic bags are tied up in knots so that no one can accidentally get it put over their head.*

While another described: *"the discipline being in the form of uh, what would be considered now, beatings. Uh, and I uh, they say I was a mischievous child so I experienced a lot of physical beatings which I was told was a form of love."* One person described the culture of the neighborhood he grew up in as contributing to physical abuse:

> *Also a lot of emphasis was placed on a, who you were as far as your sexual prowess. Uh, very limited worldview, uh, racism played a factor, discrimination played a factor, um. Also police brutality played a factor in my life.*

Most of the participants who reported sexual abuse expressed these memories as being hazy, almost dreamlike. One participant reports thinking of the abuse everyday:

> *I have um memories like real fragmented memories of being molested by a Priest in church and um possibly in the Priest's home, the rectory, um I believe I was in there at least once and obviously I would have been molested if I was in there. Um, I've had just a few dreams about that but um nothing concrete, nothing you know that a specific Priest, or I can't give a date or anything like that but I know it happened and in fact it's odd I still think about the Priest almost every day I think about him and that was a long time ago, and um so obviously I think something happened that I would still think of him.*

In couple of the instances sexual abusers were military personnel:

> *While I was waiting for my leg to heal…is when um…told me the guy who had been my trainer when I first got to base…my aircraft trainer had raped me and then…I didn't*

> *think it was a rape because I was racing bicycles…I went to my massage therapists who was also a social worker and she took one look at me and said there's something wrong…we're not doing a massage today, we're going to talk. She was the one that told me I was raped…and I said no I wasn't because I had all these classes in basic training where they show you someone jumps out from behind the bushes but she got me to understand that it was a rape…and it was four days later and I knew that I couldn't have any resolution with (inaudible).*

One participant was abused by her brother and his friend:

> *I was about 11 or 12 and uh…I was forced you know, through threats, to give him oral sex and his friend, too. Um…I was three years younger than him and much weaker than him um…he would…he often told me he was going to kill me. I felt he hated me. And everyone wanted me to be like he was…he was a…he was an overachiever.*

Another described being molested by a family member and again by a babysitter:

> *In particular one guy, was a child molester that I unfortunately had the situation of um allowing him into our family. Um he molested me and molested two of my younger sisters. Um raped me um had me have sex with other gentleman and that went on for several years. Um we thought that um there was something wrong with us of course. That you know, we weren't the only ones going through it, and it wasn't right, but there was nothing we could do about it …Um it was not my only time being raped however; I was raped by a babysitter. Uh a female babysitter that was about four years older than I was while my mother was at work. This was between her boyfriends and she taught me certain things about making love with a women so um being raped um by two different genders definitely had a bearing on my sexual and love life.*

A commonality among participants being abused, as evident in the above excerpts, was a sense of disempowerment resulting from a lack of support or ability to fight back or address the problem.

Arising problems. Many of the traumatic experiences described in the previous theme likely contributed to the arising problems identified in participants' adult lives, which occurred in very similar ways across multiple participants' transcripts. The main problems seen were: 1) early or rushed marriages which ended in divorce and legal trouble (e.g. burglary, assault, illegal firearms); 2) living unstable lives post military deployment (e.g. job loss, family troubles, domestic abuse, homelessness); 3) unexpected pregnancies; 4) problematic substance use; 5) unstable relationships and affairs; 6) emotional breakdowns during employment; 7) rising mental illness symptoms (e.g. poor emotional regulation) and associated hospitalizations and doctor visits; and 8) feeling misunderstood or 'separate' from others. Often these problems were interrelated, creating a snowball effect of arising problems. Illustrating this, one participant stated:

> *I signed a piece of paper ending my military career and I still have a couple years left but inevitably I wasn't allow to stay in past the contract date because I didn't move to Hawaii …that's when I started uh abusing alcohol… and in that one year...I've dealt with so much life and death…I lost a $100,000 dollars...um my house, I lost the house that I bought and built…my kids, my wife, my family and uh…a lot of my family did not understand me.*

Another participant stated; *"I uh got my girlfriend pregnant when I was 19 and she was 17. Uh had a got married right after she graduated high school. Had a baby, that didn't work out."* As

seen in other transcripts, arising problems were interrelated. Another participant described how his problems arose after returning from the military,

> *I [inaudible]. I just was in and out of the hospital. Um and one of the hospitalizations I met this woman XX [name]. I divorced XX [name]. XX [name] and I left town and went up to XX [location] just outside XX [location]. We got married. Um I got social security disability and got like $25,000 in back pay for that and I won a workman's comp claim and got $70,000 for that and we blew a hole through the [inaudible] and when the money was XX [name]. XX [name] was done.*

One participant specifically referred to "arising problems" in his life:

> *So when we got to school start problems started arising um, we were called liars. But it wasn't 'til us we had no concept of what they were talking about. We told stories which is what we did at home. And so social services got involved and counselors got involved because they thought our concept on reality was warped.*

Internal Experience. Data comprising 'internal experience' detail the thoughts, feelings, and emotions of participants. Although data may in part describe emotional counterparts of the experiences documented in the previous theme, they also reflect the nuances of how participants perceived, interpreted, and internalized events. Participants described feeling neglected, victimized, and connected.

Feeling neglected. All accounts of feeling neglected took place during childhood. Many of the participants did not or could not verbalize reasons they felt neglected, but half stated that they didn't feel or receive love:

> *I think I have memories of actually being in my mother's womb and being…things being very chaotic…very disturbing, very uncomfortable, I've just recalled feelings of that and*

> *when I was a child I felt that my mother never really liked me or wanted me. I never felt a part of the family.*

One participant explained:

> *I never received the attention I should have. I didn't receive the love I should have uh…I didn't receive the accolades I should have. I never received what I feel most children deserve to receive and uh..trying to compensate today by loving myself where I didn't receive love…paying attention to myself…listening to myself…um…being good to myself in those areas that I felt I was shortchanged. Um…and it just seems like the whole family was against me… like I was some type of alien…it was just wild.*

Feeling victimized. Feelings of victimization arose while at work, in the military, or in school. 'Feeling victimized' does not imply that related occurrences were not antagonistic or discriminatory; rather, these data reveal the internal responses to such situations. Similar to data in the previous theme, participants commonly lacked a sense of empowerment to respond effectively to problems. The data comprising this theme enriches data in the previous theme by illustrating not only the problematic events but also the feelings accompanying them and the participants' lack of power and self-efficacy in these situations. One of the participants discussed how he felt victimized while in school, " *I sold out my priesthood cuz I went from catholic school to public school cuz catholic school flunked me out on purpose*." Another participant described his feelings of victimization in the work setting,

> *The more they kept telling me you need to start getting things done or you're going to end up in the bottom 10%, the less I was able to accomplish. Then they put me on a personal improvement plan saying that, "here are the things that you have to do. You have four weeks to do these. If you don't get them done, we'll let you go. If you do get them done,*

we'll take you off the performance plan. You still have to do all the other work that you're supposed to be doing right now." Either one of those would have been full-time. It just…it felt like I got set up...so I got fired from there .

This quote reveals how work-related demands and conditions felt like a personal attack, perhaps seeming unfair or un-accomplishable, and thus the participant felt victimized.

Occupation. The following data categorized under the theme 'occupation' illustrate the performance patterns of participants, and are further delineated by several subthemes. In general, the sub-theme 'participating and engaging' illustrates the occupations of this study's participants. Some participants specifically describe new occupational endeavors that provided positive change. Others used occupations as a way to either escape problems (this included instances in which participants escaped through substance use) or to distance themselves from people or circumstances. The latter instances were categorized under the sub-theme 'self-segregation'.

Participating and engaging. Most participants described military involvement as their main occupation. Others described participation in school and work. Notably, many descriptions of participation at school were negative; therefore, most participants did not continue their education. Instead, they either began working or joined the military.

Most participants described engaging in work, not as particularly meaningful but rather, as something to do:

Um after XX [location] I came back to XX [location] and I worked at a correctional facility for maybe two years. I went from uh I ended up as case manager at the correctional facility. Um, that was 2010 I poured concrete one summer with my good buddy just really for something to do

Notably, many of the work experiences were short-lived and participants discussed frequently changing jobs. For example:

> *I work as an appliance technician. Got a job as an appliance technician. And I pretty much liked the job. It was okay. But after a year the guy let me go and I got another job working with the uh T.V. shop that was adding appliances to their lineup and they hired me to do the appliance technician.*

While participants did not describe deriving much meaning from their work, they also did not report non-military work to be a negative experience. Participation in the military, with a few exceptions, was largely reported as troublesome:

> *I ended up staying in the worst place on God's green earth. Fort [inaudible] will change anybody. I don't know how the military has not caught on to that we probably shouldn't leave people out in the middle of nowhere and work them like they do as much as they do and not expect people to come out absolutely bat shit crazy. Um were you military?*

As an exception, one participant explained the occupation of being in the military and how it was meaningful and gave purpose:

> *So when I was 17 I had my mom sign the paper so I could join the Army and I left when I was 18…I kind of felt like my calling…I think it…more…it kind of has to be your calling to do something like that…it's not something you would do randomly do something like that because know you are going to Iraq and Afghanistan so…it was important to me…I did that…um I did very well in the military…um…I went to the board as a staff sergeant when I was 21…I felt like I was better than most people at what I did, just because it was something that came more naturally to me than other jobs or other um skills...I just had a ..it was just my thing...I was good at it…and the time…*

Positive Change. All of the instances categorized in this theme described participants' life changes such as a joining the military, quitting the military, getting a growth spurt, and becoming a better student. Many participants joined the military with the goal of changing their lives for the better, and the initial occupational participation of being in the military was experienced as positive: "*And I went to the army, volunteered to go to desert storm, desert shield. Everything was great while I was there.*" One participant experienced a positive change when he quit the army " *got out to XX [location] threw my Army coat in the garbage can, took the first breath of my life.*" One participant experienced a break up and then spent some time participating in new occupations,

> *Um, I'm back, um oh anyway, we broke-up, I was um, really I…I spent the next year really getting my life together, saved up money, bought a new car, and lived in a really tiny house so I could save my money and um did a lot of overtime and um and I just didn't really have any girls in my life at that time for like a year. Um I'd go to the gym and like go out with you know somebody after we'd worked out or something but never turned into anything other than just friends.*

Most of the participants verbalized that they could, "finally live," or "life was good," or "I got my life together" as the reason(s) new occupations fostered positive life changes.

Escape. Most participants who described 'escape' occupations were physically leaving a bad living situation whether it was extreme (such as abuse) or mild (not liking the town or neighborhood that he or she lived in). One participant described fleeing to the military after a break up: *"she broke up with me and so I joined the AirForce."* The participants who escaped due to not liking the town they lived described their neighborhoods as slum type neighborhoods: *"From that point on, I thought about getting away from the house, so I did. I enlisted in the um*

marines." One participant left his neighborhood to "find more opportunities," and started attending college. However, when people described occupations as a means for escape, many of the occupations people escaped to were short lived, as evidenced by the following quote: *"and I got out of there pretty quickly and moved to the big city in [city] um which was after I started college and um quit my freshman year."*

Substance use. Some participants escaped negative feelings or circumstances through substance use, whereas others used substances as a recreational/leisure occupation. Most of the excerpts categorized in this theme illustrate participants' efforts to escape negative feelings or experiences via alcohol. These data are accompanied by descriptions of negative consequences of alcohol use. Many also reported marijuana use, but these data reflected routine use without negative consequences or to escape: "*But like I said, they stop by and we smoke a little something because they don't really drink*". Furthermore, data frequently illustrated a link between alcohol abuse and the military – particularly negative events that occurred while in the military. One individual highlights the extent of his alcohol use:

> *I drank heavily, I was drunk every day in the box, I had a flask on me every time, I drove drunk, I drove tanks drunk, I was a recluse. At this point I didn't care who I hurted, I wanted to hurt somebody, I was suicidal, I was like please shoot me cuz I'm not ever going to kill myself but um at the same time I don't care if someone else does it. If I'm going to go down I'm going down in a blaze of glory I guess is what they call it. I don't really call it glory cuz it's not really glory. I'm going down in a blaze I guess.*

This excerpt shows both the extent to which drinking alcohol was an occupation for the person as well as the need for emotional escape and the overall negativity surrounding both military and alcohol use. Another participant discusses the connection between alcohol and suicide:" *um I*

was gonna kill myself. I had a gun in my mouth and I was gonna pull the trigger and I was drunk."

One participant highlighted their use of marijuana as a form of escape:

> *I got out of the Army in February of this year…2014…and um…as soon as I got out…I started smoking pot…to numb myself…which it did…it helped…but you can't…you can't function properly as a human when you're stoned out of your mind…when you have responsibilities and children and things like that…but uh…it numbed me enough to uh…prolong the pain that I couldn't handle and it worked for that and I quit smoking in July and I've been…I haven't smoked since that…I've had a few incidents with alcohol…one of them…I ended up in the hospital here...I woke up in the ER a few weeks ago…because I drank too much...and I just woke up here and didn't know how I got here or anything…um…that's kind of it.*

Self-segregation. The data suggested that participants used some occupations (or embraced avoidance of occupational participation) to segregate or distance themselves from others or from troubling circumstances. While similar to data describing escape, the data categorized in this theme specifically illuminated how people separated themselves from life and/or other people as a whole, rather than just escaping a specific troubling set of circumstances. For example, one participant discussed how his feelings about people affected his participation in everyday life stating, "*Didn't want to do nothing because I didn't want to be like everybody else.*" Another participant segregated himself by staying in his home, "*I didn't leave my house unless I absolutely had to, meaning I had to be almost completely out of cigarettes and food in order for me to leave my house*." One other participant discusses his purposeful

segregation from his family by stating, " *Um, my family I absolutely is distance from me as I could possibly make them*."

Resulting Theory

Figure 1 illustrates the three main themes (in large font) established via grounded theory analysis: 'influencing environment', 'occupation', and 'internal experience'. Beneath each main theme, sub themes are listed in small font. The arrows in Figure 1 indicate the ways in which the themes were interrelated, according to the data.

Occupation and Environment. The bidirectional blue arrow illustrates the two-way interaction observed in the data between the participants' occupations and their environments. Data illustrated how a negative environment could impact occupations such as work and community mobility which in turn could enable or contribute to ongoing problematic environments. For example, one participant stated,

> *So no matter how hard I work it would always go to [stepfather's] gambling problems. I resent. I saved up all this money to buy a really nice car and he stole my money and stuck me with this junker and said I should be happy about that.*

This participant described having to work extra jobs to fund his stepfather's gambling habit and was denied the vehicle he wanted to purchase and instead received a lower quality car. Another quote illustrates how environments could positively affect and be affected by occupations:

> *Um, we were kind of living with my grandparents at the time so I remember a kind of stability there. There was always breakfast. There was always kids to play with um there's toys. It was it was a good place to live.*

This quote shows that when the participant had a positive environment in childhood, he was able to engage in positive occupations such as play, which contributed to a positive and engaging environment for him and his siblings. Another participant noted : "*We have a seven-year old daughter together. Her name is *** and she is the light of my life. She is my motivator. She keeps me going.*" For this participant, having a child contributed to the participant's motivation to create a positive family environment that was, in turn, uplifting and motivating. Being a parent, however, was also described as creating environmental demands that the participant was not equipped to handle:

> *So she and I fought a lot and I was I started to become violent at that point. I was very violent to both my sisters. Cuz I couldn't cope with the fact that I needed I had I had to budget for the food, I had to make sure the shopping got done and the house got cleaned, the cars got taken care of.*

Additionally, this participant's relationships with his siblings were strained due to the demands of being a parent, having a negative impact on this social environment. For this participant, the occupation of being a parent created a stressful environment that consisted of social stressors and occupational demands that the participant could not handle.

Occupation and Internal Experience. The bidirectional grey arrow illustrates a two-way interaction observed in the data between clients' occupations and their internal experiences. Clients' occupational choices impacted their internal experiences. In turn, internal experiences shaped their participation level in occupations. This included *what* occupations participants chose to engage in as well as the nature of participation (e.g. short-lived, self-harming, a means of escape). For example, some participants described difficulty in occupational participation following loss of loved ones: "*About three months after he [the father] died, I started not being*

able to function at work" and how lack of participation in life contributed to ongoing or increasing feelings of sadness.

The unidirectional orange arrow illustrates that clients' environments impacted how they experienced life events internally, but that, according to the data, their internal feelings did not directly alter their external environments. One participant described:

> *I have a one older brother. He is three years older than me. I would say we were fairly close um…now we are not quite as close anymore, but it is just more because of geographical and…and adults you get busy when you have kids and stuff like that*.

This quote shows how the environment, in this case the geographical location, had an effect on the participant's ability to connect with his brother, but his internal feelings about the lack of connection were not followed by any related environmental or occupational changes.

Data showed the relationship between internal experiences and the person's environment as unidirectional, where the environment impacts internal experience but not vice versa. However, internal experience has a bidirectional relationship with occupation, which has a bidirectional relationship with environment. Internal experience can indirectly influence environment though occupation. As social participation is included under the theme of occupation, this shows that internal experience can indirectly affect a person's social environment. This inter-relatedness of themes demonstrates an overall (albeit indirect) relationship between all of the themes, as shown by the circular flow of Figure 1.

Discussion

In the context of occupational therapy, occupations have been defined as: "The things that people do that occupy their time and attention; meaningful, purposeful activity; the personal activities that individuals choose or need to engage in and the ways in which each individual

actually experiences them" (Boyt Schell, Gillen, & Scaffa, 2014a, p. 1237). According to the Occupational Therapy Practice Framework (OTPF), "Occupations occur in context and are influenced by the interplay among client factors, performance skills, and performance patterns" (AOTA, 2014, p. S6). Data from this study suggest occupation is bidirectionally linked to both internal experience and environment. As such, it may be a powerful means for initiating change in both of these areas. In other words, the findings of this study suggest that occupational therapists may be uniquely situated to positively alter the internal experiences and environments of people with BPD by facilitating positive, meaningful participation in occupations.

As mentioned in the literature review above, BPD is known to affect women more than men. A previous study done by Falklof & Haglund (2010) mainly looked into the occupational lives of women with BPD and found main themes of having a lack of daily occupations and the inability to adapt to changes in daily life as a result of negative self-image and incompetence to perform occupations. The researchers of this study found similar themes with a primarily male participant pool as shown in Table 1.

Data from this study showed that many of the participants had difficulty sustaining relationships and that this difficulty was often related to symptoms of BPD. Therefore, occupational therapists may positively influence the lives of people with BPD by promoting occupational engagement through social participation and occupations. This form of occupation-based intervention may help people with BPD create and sustain supportive environments. Sansone and Sansone (2009) report that family intervention could be an effective way of addressing the social environment of individuals with BPD by encouraging family skills, social network building, and coping skills. Nouvini (2017) also found that involving family of those with BPD in treatment can create a therapeutic relationship that can transfer over to all social

relationships to create a more positive social environment.

In addition to difficulty sustaining relationships, the participants of this study often reported difficulty keeping jobs. Participants frequently reported dropping out of school and engaging in criminal behavior. The symptoms of BPD such as drug use often became occupations for the participants. Many of the participants developed a role as a mentally ill person and incorporated this new role into their personal identity. Although substance abuse is a symptom of BPD, it typically became an integral part of participants' everyday social and financial life. This is in line with prior research by Heibig and McKay (2003), who examined substance abuse as an occupation and how occupation is affected by internal and external environments. The researchers concluded that negative environments can lead to occupational imbalance, deprivation, and alienation (Helbig & Mckay, 2003). More recently, Wasmuth, Scott, and Crabtree (2014) suggested that addiction is occupational in nature and that providing new occupations may facilitate drug abstinence and recovery in people with addiction and mental illness (Wasmuth et al., 2014; Wasmuth & Pritchard, 2016). This research supports the current proposition that occupational therapists may help clients positively influence their environments and experiences by fostering healthy occupational participation.

Limitations

Typically in grounded theory the researchers re-interview participants during the data analysis process on an ongoing basis to verify and distinguish themes as they emerge. However, in this study the researchers analyzed pre-existing data obtained from a single interview. Participants were not available for researchers to re-interview. However, the data collection tool used for this study is designed to provide rich, qualitative stories of personal experiences and provided researchers with lengthy narratives about participants' life stories. Additionally, most

of the data was from veteran male participants who were primarily white, therefore illustrating themes that may be specific to this sub-population.

Future Research

It may be beneficial to conduct a mixed methods study that examines the qualitative experiences of people with BPD alongside quantitative factors such as age, race, employment status, metacognition and other functional cognitions tests, and symptomatology. A study conducted by Johnson and Onwuegbuzie (2004) compared the mixed methods approach to the traditional qualitative and quantitative approaches. Based on this research, they concluded that mixed methods can test grounded theory designs, provide more evidence to support conclusions, and can work in conjunction with qualitative and quantitative methods in order to improve the overall findings related to practice (Johnson & Onwuegbuzie, p. 21, 2004). Based on this study's findings, future research should also explore the effectiveness of occupation-based interventions for positively impacting internal experience and environments of people with BPD.

Conclusion

Findings illustrated how occupations affected both environmental contexts and internal experiences such as self-image and appraisal of relationships and events. This research underscores how occupational therapy may powerfully impact lives of people with BPD and suggests that people with BPD may have the ability to alter their internal experiences and their environments through intentional use of occupational engagement. This research is unparalleled because it looks specifically at the occupational lives of men with BPD and suggests occupational therapy may facilitate meaningful change through occupation-based intervention. Intentional efforts at occupational participation may beneficially address the centrally troubling

features of BPD including problematic self-image, self-harm, and risky or disaffirming environments.

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Appendix A

Figure 1

Resulting Theory

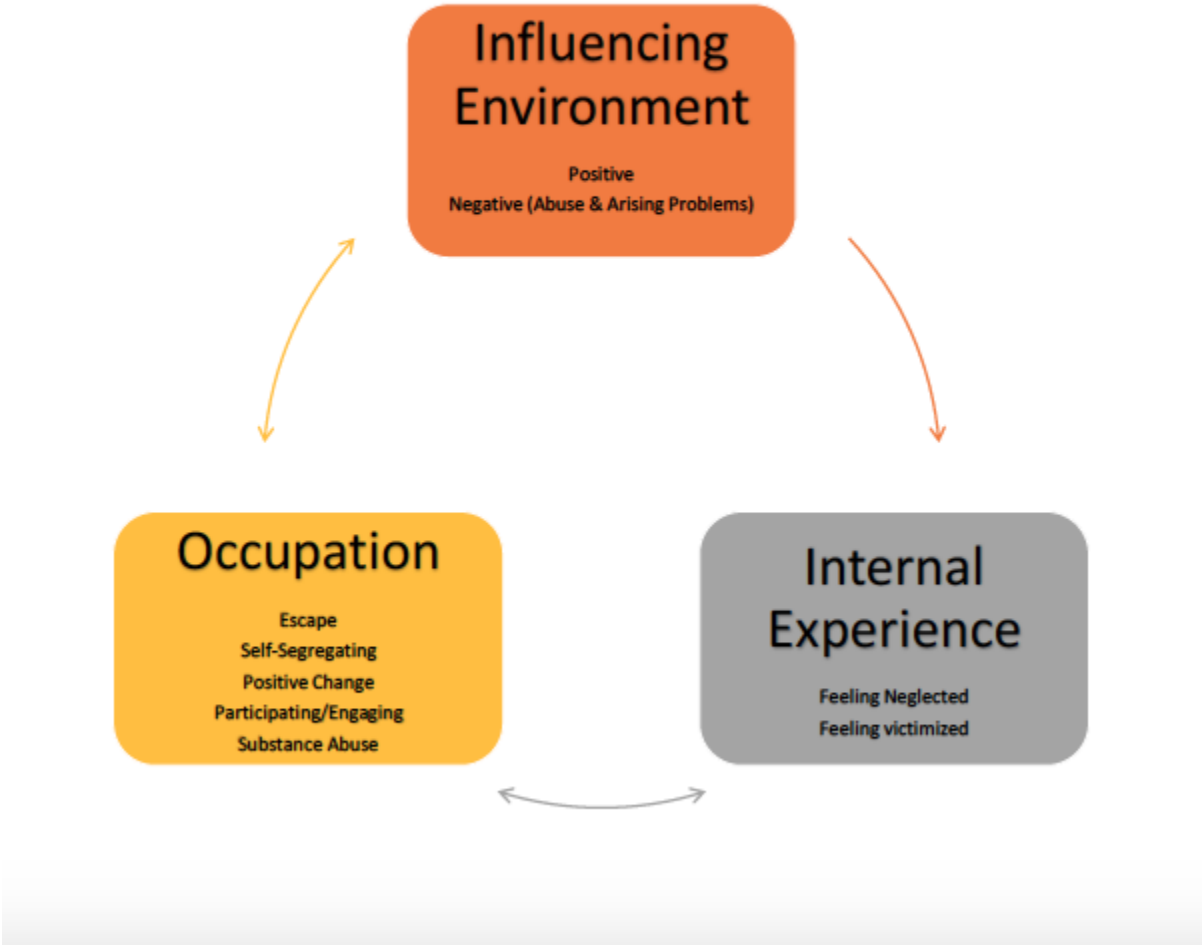

Table 1

Participant Characteristics - The participant number was used to identify each participant in the study. The MAS numbers are quantitative ways to measure the different areas of metacognition of each participant. MAS S represents self-reflectivity, MAS O represents understanding others' minds, MAS D represents decentration, and MAS M represents mastery. Axis I addresses the mental health disorders and Axis III addresses the physical disorders that were co-morbid with the BPD diagnosis. Substance preference shows the substances used by each participant.

Participant Number	MAS S	MAS O	MAS D	MAS M	AXIS I	AXIS III	Substance Preference	Ethnicity	Age	Sex
26	7	4.5	0	4	Bipolar Type 2	None	Alcohol, Cannabis	Caucasian	28	M
29	9	5.5	2	7.5	PTSD, Alcohol abuse, anxiety, depression	None	Alcohol	Caucasian	26	M
31	4	3.5	1	4	PTSD, MDE,	None	Alcohol	Caucasian	35	M
33	8	3.5	1	6	PTSD, Depression, Anxiety, Alcoholism	None	Alcohol	Caucasian	44	M
34	8	4	0.5	5	PTSD, Depression, Anxiety	COPD	None	Caucasian	51	M
35	6	4.5	0.5	2	Bipolar, MDD	None	None	Caucasian	54	M
36	6	4.5	0.5	5	MDE	None	Alcohol	Caucasian	53	M
38	6	5	1	4	PTSD, Bipolar,	COPD	Alcohol	Caucasian	62	M

					MDD, substance dependence					
44	6	4	0.5	3	PTSD, Depression	None	Alcohol, Crack	African American	44	M
46	7	5	1.5	4	Major depression, OCD, PTSD	None	None	Caucasian	53	F
47	3.5	2	0	3	Adjustment disorder, Depression, Anxiety	None	Alcohol	Caucasian	38	M
50	7	2	0	4	PTSD, Anxiety, Depression,	None	Crack cocaine	African American	52	M
55	4	3.5	0.5	4	PTSD, depression, anxiety,	None	Alcohol	Caucasian	67	M
57	5	4	0.5	4	None	Pancreatic shock	Alcohol	Caucasian	54	M
58	3.5	3	0	3	PTSD, depression	None	None	Caucasian	56	M
65	4	3	0.5	5	Anxiety, Depression, GAD,	Fibromyalgia, joint issues	999	Interracial	49	F
84	6	2	0	3	PTSD, MDD	None	Alcohol, Downers, Cannabis, Opioids, Cocaine	African American	35	M
85	3.5	2	0.5	2	Bipolar II Disorder,	None	Alcohol, Cocaine,	African American	67	M

					PTSD		Marijuana			