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Misdiagnosing Borderline Personality Disorder: Does Setting Bias and Gender Bias Influence Diagnostic Decision-Making?

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**MISDIAGNOSING BORDERLINE PERSONALITY DISORDER: DOES
SETTING BIAS AND GENDER BIAS INFLUENCE DIAGNOSTIC DECISION-
MAKING?**

PROFESSIONAL DISSERTATION

SUBMITTED TO THE FACULTY

OF

**THE SCHOOL OF PROFESSIONAL PSYCHOLOGY
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BY

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Abstract

Inaccurate diagnoses due to clinician bias may lead to the facilitation of inappropriate mental health treatment and poor prognosis for treating clients presenting concern, as the cause of the disordered behaviors that led to their incarceration are not being addressed. The current study sought to determine whether clinician gender bias and clinician setting bias affects the diagnosis of Antisocial Personality Disorder and Borderline Personality Disorder amongst clients in correctional settings. Determining whether bias affects diagnosis of these disorders amongst clients in correctional settings is important in order to assure clients are receiving appropriate mental health treatment. Incarcerated individuals who receive appropriate mental health treatment may have lower rates of recidivism, with obvious societal benefits. The current study surveyed a sample of 124 mental health professionals to determine whether manipulating gender and/or setting bias impacted mental health professionals' abilities to accurately diagnose Borderline Personality Disorder. Results suggest setting bias impacts mental health professionals' abilities to accurately diagnose Borderline Personality Disorder.

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Chapter 1

Statement of the Problem

Personality disorders are defined as a global maladaptive behavior pattern that is considered culturally inappropriate (American Psychiatric Association, 2013). These maladaptive behaviors lead to distress and impairment in the daily functioning of individuals (Skodol, Johnson, Cohen, Sneed, & Crawford, 2007). Two personality disorders that have been found to have similar maladaptive behaviors are Antisocial Personality Disorder (ASPD) and Borderline Personality Disorder (BPD; Chun et al., 2016). An individual with ASPD or BPD may face societal repercussions for breaking societal norms and rules. Ultimately, consequences for breaking these rules and norms can lead to contact with correctional settings.

Generally, ten to fifteen percent of diagnostic error may occur in correctional settings (Martin, Hynes, Hatcher, & Colman, 2016). In correctional settings, inmates may be diagnosed with either ASPD or BPD incorrectly due to biases that clinicians may hold. Determining whether clinician bias impacts accurate diagnosing of ASPD and BPD in correctional settings may improve treatment for inmates.

Clinician bias can easily influence clinicians to incorrectly diagnose ASPD or BPD due to the symptom overlap for both disorders. For example, expressing anger in a maladaptive and impulsive way are symptoms of both BPD and ASPD. The similarity in symptoms increases the likelihood that clinicians will misattribute symptoms of one

disorder due to internal representations of how these disorders look, stereotypical representations of these disorders, or how individuals conform to gendered behaviors. For example, ASPD is a diagnosis that is often given by clinicians to incarcerated males whereas BPD is a diagnosis that is often given to incarcerated females (Fazel & Danesh, 2002). When clinicians are diagnosing incarcerated clients with either BPD or ASPD, they may be using gender-biased heuristics or attending to gender-specific characteristics, rather than paying close attention to differences in symptomatology.

Clinicians using gender-specific characteristics when diagnosing ASPD and BPD in correctional settings may misdiagnose male offenders displaying symptoms of BPD. For example, BPD is frequently associated with dysfunctional expression of emotions. Expressing a wide array of emotions is considered gender-typical behavior for women. Believing that emotional expressiveness is a solely feminine trait may lead to clinicians assuming dysfunctional emotional expression in male clients with BPD will look similar to dysfunctional emotional expression in female clients with BPD. However, aggressiveness is considered gender-typical behavior for men. A male client could potentially dysfunctionally express his emotions in an aggressive way. This gender bias can lead to clinicians underdiagnosing men with BPD when the BPD diagnosis in a man is not straightforward (Banzhaf et al., 2012; Braamhorst et al., 2015). Clinicians diagnosing male clients who have BPD with ASPD may also be confused by overlapping symptoms. For example, expressing anger in a maladaptive and impulsive way are symptoms of both BPD and ASPD. Given the lack of clarity of the cause of anger and

impulsivity, clinicians may use other information, such as gender or setting, when considering a diagnosis for their clients.

The current study used experimental (2x2) design, manipulating a single vignette only by gender (male or female) and setting (residential correctional setting or an inpatient psychiatric hospital). The client depicted in the vignette expressed traits of BPD that may be mistaken for ASPD traits. The participant selected either an ASPD or BPD diagnosis for the client. Following providing a diagnosis for their fictional client, participants were asked about the impact the setting in which the fictional client was being treated had on their diagnostic decision making. Other questions, such as the diversity training the participant has received was also collected and will be considered in the discussion section, if relevant.

Results from the study suggest clinician setting bias influences clinician diagnosis, where ASPD is more likely to be diagnosed in correctional settings, regardless of gender of the client. Participants who perceived themselves as competent and clinicians who perceived themselves to have training in diversity still misdiagnosed their fictional client with ASPD in correctional settings. The findings suggest clinicians need to become aware of implicit and explicit biases they hold toward specific populations and settings. Training programs need to work on providing more effective diversity training, incorporating self-reflection to pinpoint biases clinicians have. More programs would benefit from incorporating education on the impact involvement in the criminal justice system has on the client, as well as a clinician's ability to diagnose in a correctional setting.

Chapter 2

Literature Review

Borderline Personality Disorder (BPD) and Antisocial Personality Disorder (ASPD) overlap in symptoms. This overlap in symptoms may make it difficult for clinicians to accurately diagnose BPD and ASPD. Overlapping symptoms for BPD and ASPD include manipulative behavior and impulsivity (Buchheim, Roth, Schiepek, Pogarell, & Karch, 2013; DeShong & Kurtz, 2013; Hoffer, 1989; Komarovskaya, Loper, & Warren, 2007; Sansone & Sansone, 2013). These traits can lead to behaviors that may result in a person having contact with a correctional setting (Buchheim et al., 2013; DeShong & Kurtz, 2013; Hoffer, 1989; Komarovskaya et al., 2007; Mandal & Kocur, 2013; Sansone & Sansone, 2013).

Symptom overlap between BPD and ASPD may result in clinicians using biased decision making in determining when to accurately diagnose clients with these disorders. For example, although both BPD and ASPD result in symptoms that can lead to contact with correctional settings, ASPD is a diagnosis given frequently in correctional settings (Stevens, 1994). As a result, if clinicians working in correctional settings are considering both ASPD and BPD diagnoses, they may be biased by the setting in which they work, leading to a diagnosis of ASPD, whether or not that diagnosis is congruent with the inmates' presentation.

Investigating the similarities and differences between BPD and ASPD may help limit the impact that clinician bias has on clinicians accurately diagnosing these disorders in correctional settings. To accurately diagnose BPD and ASPD in correctional settings, clinicians must understand how both disorders can lead to criminal behavior. Clinicians in correctional settings will also diagnose BPD and ASPD more accurately if they understand the diagnostic criteria, theories of development regarding these disorders, the pervasiveness of these disorders, and the ways in which people with BPD and ASPD express symptomatology.

BPD

An accurate understanding of the themes and diagnostic criteria of BPD can lead to a client being appropriately diagnosed with this disorder. The DSM-5 criteria for BPD can be found in Appendix A. The DSM-5 criteria for BPD identifies individuals with the diagnosis as having unstable relationships, poor view of self, unstable expression of mood and emotions, poor impulse control, and engaging in self-harm behaviors. (American Psychiatric Association, 2013; Sansone, Songer, & Gaither, 2001). Two theories that attempt to explain the etiology of how these themes manifest in individuals who are diagnosed with BPD are Masterson's Theory of BPD and Marsha Linehan's Biosocial Model of BPD.

Masterson's Theory of BPD. Masterson's Theory is a theoretical explanation for the development of BPD that uses a psychodynamic framework. Masterson (1976) suggested that BPD develops because individuals with BPD use maladaptive defense mechanisms in order to get their needs met, to avoid pain, and to receive pleasure

(Roberts, 1997). Maladaptive defense mechanisms those with BPD use include avoidance and projection. Individuals with BPD avoid and project their problems onto others without taking into consideration any short-term and long-term consequences that could be damaging to them (Roberts, 1997).

Masterson's Theory incorporates object-relations theory in the explanation of BPD (Roberts, 1997). Object relations units are templates for interpersonal interactions that develop from individuals' early interactions with their caregivers (Levine & Faust, 2013). Two object relations units that are important in the development of BPD include the rewarding object relations unit and the withdrawing objects relations unit (Roberts, 1997). In the rewarding object relations unit, individuals seek reassurance that they are being taken care of by depending on others. In contrast to the rewarding object relations unit, the withdrawing object relations unit leads people to become defensive or isolate themselves when they sense they are being separated from others (Roberts, 1997). Activating the withdrawing object relations unit leads individuals with BPD to respond with anger when there is fear of separation from a relationship (Roberts, 1997).

Individuals with BPD behave in accordance to either the rewarding object relations unit, the withdrawing object relations unit, or both units together. The object relations unit an individual with BPD is behaving in accordance with predicts the type of maladaptive behavior they may exhibit (Roberts, 1997). When individuals are behaving in accordance to the rewarding object relations unit, they are dependent upon others in order to keep from experiencing separation anxiety and depression (Roberts, 1997). In contrast, relying on the withdrawing object relations unit can result in individuals using

avoidance and projection to suppress how they are feeling in order to relieve depression and separation anxiety (Roberts, 1997). When individuals with BPD are aligned with the withdrawing object relations unit, they externalize their experiences of abandonment and depression as a way to avoid experiencing these emotions (Roberts, 1997). Individuals with BPD may often externalize their experiences of abandonment and depression by expressing anger. Externalizing and suppressing experiences of abandonment and depression can occur in individuals with BPD who act in accordance to both the withdrawing objects relations unit and the rewarding object relations. Identifying with the rewarding object relations unit leads to suppressing feelings of separation anxiety. Contrastingly, identifying with the withdrawing objects relations unit leads to expressing fears of abandonment externally (Roberts, 1997). Roberts (1997) mentioned both object relations units can be activated at the same time. Individuals with BPD who act in accordance with both units often have unstable relationships, viewing a relationship as supportive at one moment and uncaring at another moment (Roberts, 1997).

Marsha Linehan's Biosocial Model of BPD. Marsha Linehan's Biosocial Model of BPD is another theory used to explain the development of BPD. According to Marsha Linehan's Biosocial Theory, BPD develops when a child is raised in an invalidating environment and is biologically predisposed to be highly reactive and impulsive. As a result of having a highly reactive disposition and being reared in an invalidating environment, a child will have difficulty in controlling his/her/their emotions (Linehan, 1993). Experiencing invalidating environments in childhood can result in individuals being unable to recognize when they are in an emotionally aroused state (Linehan, 1993).

Emotion dysregulation results from a child's inability to implement effective strategies to manage his/her/their emotions. (Linehan, 1993).

When a child grows up in an invalidating environment, personality development can be negatively impacted. An invalidating environment can contribute to a child displaying impulsivity, negative affectivity, emotional oversensitivity, and poor emotional-regulation skills (Linehan, 1993). Significant emotional dysregulation is likely to be seen in those who were taught insufficient emotional regulation by their caregivers when they were children. An individual may also develop insufficient emotional regulation skills when their caregivers themselves lack adequate emotional regulation skills (Crowell, Beauchaine, and Linehan, 2009). As a result, the child has not had an opportunity to observe or learn adaptive emotional coping, instead relying on partners and friends to try to provide them with internal emotional stability (Crowell et al, 2009).

Emotional dysregulation can surface in the form of increased sensitivity to the experience of one's own emotions, an exaggerated emotional response to stimuli in the environment, and/or an inability to return to a baseline expression of emotions (Crowell et al, 2009). The emotionally dysregulated individual displays difficulties in processing information in the environment, regulating moods, and achieving goals that are not based upon mood. As a result, one's social, cognitive, emotional, and behavioral responses are negatively impacted (Crowell et al., 2009).

Due to emotional dysregulation, an adult with BPD will often express the same emotional and behavioral responses that he/she/they developed from being placed in invalidating environments as a child (Linehan, 1993). Adults who express these

immature emotional and behavioral responses often set unrealistic goals and lack skills with implementing punishments or rewards toward themselves. As a result, adults may hate themselves if these unrealistic self-induced goals are not met (Linehan, 1993).

Without appropriate interventions to regulate emotions and behavior, people with BPD will continue to display dysfunctional behaviors throughout adulthood.

Dysfunctional behaviors displayed by individuals with BPD can lead to criminal activities that result in them being placed in correctional settings. Emotional dysregulation can lead to aggressive and impulsive behavior that is against the law (Martino et al., 2015; Sauer-Zavala, Geiger, & Baer, 2013). Individuals with BPD may display physical aggression, as a result of impulsivity (Moore, Tull, & Gratz, 2017). Impulsive criminal behavior may occur in an explosive, emotional, and episodic manner (de Barros & de Serafim, 2008). As a result, criminal interpersonal behavior can be a way in which symptoms of BPD are expressed. Criminal interpersonal behavior is often seen in men with BPD through the display of physical aggression. For example, men with BPD who are the perpetrators of violence will often display violent behaviors towards their partners in a reactive, impulsive manner (Ross & Babcock, 2009; Weinstein, Gleason, & Oltmanns, 2012). In fact, BPD is commonly diagnosed in correctional settings (Black et al., 2007; Fazel & Danesh, 2002), where women have a 55% chance of receiving a BPD diagnosis and men have a 27% chance of receiving a BPD diagnosis.

ASPD

The DSM-5 criteria for ASPD can be found in Appendix B. The themes of the DSM-5 diagnostic criteria for ASPD include disregarding and violating the rights of others (American Psychiatric Association, 2013). The disregard for others is a central component of why ASPD is hard to treat (Martens, 2000). The potential difficulty with providing effective treatment for people with ASPD can be understood by examining the developmental course of ASPD. Two theories that attempt to explain the developmental course of ASPD are the Psychobiological Model of ASPD, and Patterson's Model of Antisocial Development.

Psychobiological Model of ASPD. The Psychobiological Model of ASPD presented by Siever and Davis (1991) suggested that ASPD derives from an interaction of both genetic and psychological factors. According to these authors, ASPD results from an inability to restrain oneself from engaging in aggressive and impulsive behaviors that break societal norms (e.g., lying, stealing, etc.) due to brain dysfunction. Brain dysfunction which contributes to aggressive and impulsive behaviors include a reduced ability to control motor responses and a lower cortical inhibitory function (Siever & Davis, 1991). As a result of brain dysfunction, individuals with ASPD respond to stimuli in the environment by having a decreased ability to delay or inhibit actions (Siever & Davis, 1991).

Patterson's Model of Antisocial Development. Patterson's Model of Antisocial Development is another model that can be used to conceptualize ASPD. In Patterson's Model of Antisocial Development, ASPD characteristics result from poor parental

management and discipline in early childhood (Patterson, DeBaryshe, & Ramsey, 1989), which leads to conduct issues (Patterson et al., 1989; Patterson, 1996). Conduct issues can result in academic failure and peer rejection of these children during their middle childhood (Patterson et al., 1989). Conduct issues in middle childhood can also lead to children becoming involved with antisocial peers. Children who have conduct issues in middle childhood will begin displaying delinquent behaviors in late childhood or adolescence (Patterson et al., 1989; Patterson, 1996). If the individual continues to display these behaviors into adulthood, he/she/they may meet criteria for ASPD.

ASPD and Psychopathy. Psychopathy is a syndrome that some individuals who are diagnosed with ASPD may have (Hare & Hart, 1991; Wall, Wygant, & Sellbom, 2015); however, not all individuals who meet criteria for ASPD will also meet criteria for psychopathy. Due to psychopathy being related closely to ASPD, the DSM-5 diagnostic criteria for ASPD is often criticized for not distinguishing ASPD from psychopathy. However, these two disorders are not synonymous; ASPD and psychopathy have differences both in symptomatology and expression. Psychopathy is thought to lead to more severe, violent behaviors than ASPD (Coid & Ullrich, 2010). The severe, violent behaviors that psychopathic individuals may display are exacerbated by naturally low fear, low empathy, high social dominance, and venturesome natures (Lilienfeld et al., 2012; Wall et al., 2015). The differences between ASPD and psychopathy make it difficult to place clients who behave criminally under a single diagnostic umbrella. However, clinicians often give individuals who meet criteria for psychopathy an ASPD diagnosis. The high rate of the ASPD diagnosis in correctional settings could be a

potential illustration of clinicians conflating ASPD and psychopathy diagnoses (Black et al., 2007; Fazel & Danesh, 2002; Zlotnick et al., 2008).

ASPD in Correctional Settings. Approximately 50% of males in prisons have an ASPD diagnosis (Black et al., 2007; Fazel & Danesh, 2002; Zlotnick et al., 2008). ASPD diagnoses are often seen in maximum security correctional facilities. However, the rate of ASPD diagnoses in correctional settings may be misleading due to a potential high rate of false-positive diagnoses of ASPD in correctional settings (Ogloff, 2006). False-positive diagnoses of ASPD can result from clinicians failing to account for whether a client had a Conduct Disorder diagnosis during childhood and relying too heavily on whether or not a client behaves violently and manipulatively (Vaeroy, 2011). Another false-positive diagnosis of ASPD can occur from conflating criminal behavior with ASPD.

Although criminal behavior is often associated with ASPD, criminal behavior can also be an expression of symptoms from other psychological disorders and can occur even when no disorder is present (Fazel & Danesh, 2002; Gunter et al., 2008). Other psychological disorders that result in criminal behavior include psychotic disorders and major depression (Fazel & Danesh, 2002). Awareness of other psychological disorders that can result in criminal behavior is important for clinicians to keep in mind in order to make more accurate diagnoses in correctional settings.

The setting in which clinicians are providing treatment can influence how they perceive the behavior of the clients they are treating (Rosenhan, 1973). Clinicians may be quick to diagnose those with ASPD in correctional settings due to associating ASPD

with criminal behavior. When clinicians are diagnosing in correctional settings, the correctional setting can create a space in which the attribution of the criminal behavior of the person being diagnosed is misunderstood as being initially attributed to antisocial behavior in correctional settings. Clinicians will be more likely to make accurate diagnoses if they do not attribute clients being mandated to correctional settings as more likely to meet an ASPD diagnosis simply by being an inmate.

Clients mandated to correctional settings could potentially meet criteria for a BPD diagnosis rather than an ASPD diagnosis. They may be easily mistaken one for another, because BPD diagnoses and ASPD diagnoses have similarities in both their diagnostic criteria and symptom expression. Being aware of these similarities is important for clinicians to recognize when accurately diagnosing ASPD and BPD in correctional settings.

Similarities between BPD and ASPD Diagnoses

Similarities between BPD and ASPD may be a contributing factor as to why clinicians may misdiagnose BPD for ASPD and vice versa. Similarities between BPD and ASPD include not only overlap in diagnostic criteria, but also neuropsychological deficits. Overlap in criteria and similarity in neuropsychological profiles have been proposed to account for symptom comorbidity and similarities between BPD and ASPD (Chun et al., 2006).

Neuropsychology. Similar structures of the brain are impacted by both BPD and ASPD. Neuroimaging suggests both clients with BPD and ASPD may have dysfunctions in the communication between the cortical and sub-cortical centers of the serotonergic

system (Buchheim et al., 2013). Another brain dysfunction common in those with BPD and ASPD is a hyperactive response to emotional stimuli due to a smaller hippocampus and increased activity in the amygdala (Buchheim et al, 2013). As a result, both people with ASPD who do not also meet criteria for psychopathy and people with BPD may have hyperactive responses to emotional stimuli (Buchheim et al, 2013). In addition, people with BPD and ASPD both have decreased levels of serotonin and dysfunctions in the frontal lobe (Buchheim et al, 2013).

Manipulative Behavior. Another similarity between BPD and ASPD is manipulative behavior; however, the motive behind being manipulative varies between BPD and ASPD. People with BPD are often manipulative due to interpersonal motives, such as attempting to gain concern from a caretaker (American Psychiatric Association, 2013); as such, it may be an attempt to get interpersonal or psychological needs met. Another motive for being manipulative is to obtain benefits and avoid negative consequences of their actions (Mandal & Kocur, 2013). Other common forms of manipulation that people with BPD employ are threatening, especially in the form of threatening to break off close relationships, begging, lying, and trying to arouse guilt (Mandal & Kocur, 2013).

The motives for those with ASPD to manipulate tends to differ from the motives of those with BPD. Manipulative behavior expressed by one with ASPD may be due to a person's failed identity formation when he/she/they were younger (Hoffer, 1989). This failed identity formation often leads one to distrusting self and others (Hoffer, 1989). As a result, those with ASPD are manipulative due to personal gain at the expense of others

(American Psychiatric Association, 2013), rather than attempting to receive emotional support.

Impulsivity. Impulsivity is another characteristic common to both BPD and ASPD. Common types of impulsivity expressed in people who have BPD include starting a task and not finishing, bingeing, acting carelessly, not resisting cravings and acting impulsively to reduce negative affect (DeShong & Kurtz, 2013). In contrast, common types of impulsivity displayed by people with ASPD include pursuing excitement and acting without thinking and planning (DeShong & Kurtz, 2013). Regardless of the motives, impulsive behaviors expressed by both individuals with BPD and individuals with ASPD can precipitate illegal activities and ultimately lead to contact with the criminal justice system. Impulsive behaviors that commonly lead those with BPD to have contact with the criminal justice system include aggressive behaviors such as interpersonal violence, disorderly conduct, and public drunkenness/intoxication (Sansone & Sansone, 2012). Contrastingly, criminal behavior in those with ASPD include both violent and nonviolent crimes as a result of low self-control and/or failure to think of the consequences of their actions (Komarovskaya et al., 2007).

Differences between BPD and ASPD

Although BPD and ASPD have similarities, several differences exist between these diagnoses. Focusing on the differences between BPD and ASPD can aid clinicians when attempting to accurately determine whether a client is expressing symptoms of BPD or ASPD. Prognosis of treatment and gender expression of BPD and ASPD are two fundamental differences between these disorders.

Prognosis of Treatment. The prognosis of treatment for ASPD and BPD can vary; however, ASPD has poorer overall outcomes for treatment than BPD (Choi-Kain, 2017; Gerstley et al., 1989; Martens, 2000). Understanding the differences in prognosis of treatment for these two disorders is necessary in order to aid in understanding each disorder better and in facilitation of appropriate treatment.

ASPD. ASPD characteristics tend to surface in children between the ages of seven and nine years old, with full criteria for ASPD being met in their late twenties to early thirties (Martens, 2000). Individuals who meet full diagnostic criteria for ASPD may show a decrease in symptom expression, or even symptom remission once they enter their forties (Martens, 2000). Although symptom remission of ASPD can occur in middle adulthood, the prognosis of treatment for individuals with ASPD is poor (Gerstley et al., 1989; Martens, 2000). Due to the lack of specialized treatments for ASPD, treatment for individuals with ASPD must be tailored to each client in order to promote change (Martens, 2000). The prognosis of treatment for those with ASPD is more optimistic if the client has a positive relationship with his/her/their therapist (Gerstley et al., 1989).

BPD. The prognosis of treatment for BPD is more optimistic than the prognosis of treatment for ASPD. Several specialized treatment modalities can be used to treat BPD including Dialectical Behavior Therapy (DBT), Mentalization-Based Treatment (MBT), Transference-Focused Psychotherapy (TFP), and Schema-Focused Therapy (SFT; Choi-Kain, 2017). In particular, DBT skills training has shown signs of improvements in clients' behaviors in as little as three months (Soler et al., 2009).

Psychotropic medications have also shown signs of being effective in reducing symptoms of anger and depression in clients with BPD (Mercer, Douglass, & Links, 2009), although they have little impact on the underlying aspects of the disorder, or in remitting the impulsiveness and poor emotional control displayed by these individuals.

Expression between Genders. Gender differences in the expression of BPD and ASPD are also fundamentally different (Sansone & Sansone, 2011). Without understanding that there are gender differences in the expression of each disorder, clinicians may make the assumption that BPD and ASPD looks the same for men and women, which can lead to misdiagnosing BPD in men and ASPD in women.

Women with BPD are more likely to express suicidality, self-mutilation, affective instability, and chronic feelings of emptiness than men with BPD (Hoertel, Peyre, Wall, Limosin, & Blanco, 2014). In comparison to men with BPD, women with BPD are more likely to experience symptoms of somatization, depression, and anxiety (Silberschmidt et al., 2015). Comorbidity of eating disorders, mood disorders, posttraumatic stress disorder, and anxiety disorders are more likely to be seen in women with BPD than men with BPD (Sansone & Sansone, 2011).

Temperament is another gender difference seen in those with BPD. Men with BPD are more likely than women to have explosive tempers and higher attempts at sensation seeking in their environments than women (Hoertel et al., 2014; Sansone & Sansone, 2011). Men are also likely to have a comorbid substance use disorders when diagnosed with BPD than women (Sansone & Sansone, 2011). Men with BPD are more

likely to meet criteria for binge eating disorder and conduct disorder as a child than women with this diagnosis (Banzhaf et al., 2012).

Women with ASPD have a greater likelihood of having experienced emotional neglect and sexual abuse than men with ASPD (Alegria et al., 2013). Women with ASPD are also more likely than men to have experienced adverse events during adulthood (Alegria et al., 2013), such as being the victim of sexual abuse, being the victim of intimate partner violence, lowered access to social supports, and adverse events related to their parents (Alegria et al., 2013).

In contrast to women with ASPD, men with ASPD are more likely to be aggressive, irritable, and violent (Algeria et al., 2013). Violence in men with ASPD may surface in the form of perpetrating violence in intimate relationships (Kelley & Braitmen, 2016; Maneta, Cohen, Schulz, and Waldinger, 2013). One explanation for an increased likelihood of men with ASPD being more violent, aggressive and irritable than women is due to men being socialized to behave more aggressively than women (Levant, 1995). Another explanation for the increased likelihood may be due to increased testosterone levels in men (Aromäki, Lindman, & Eriksson, 1999).

Clinician Bias in Diagnosing ASPD and BPD

Gender differences in the expression of BPD and ASPD may account for some misdiagnosis of ASPD in women and BPD in men. Another reason that clinicians may misdiagnose ASPD and BPD between men and women is clinician bias. Clinicians must be aware of implicit and explicit biases they may hold when diagnosing ASPD and BPD in clients, in order to provide clients with adequate and appropriate care. Other than

gender bias, clinicians must be aware of other biases due to culture of clients and clients' sexual orientation. Two types of biases, gender bias and setting in which clients are being treated, are central to the current study and will be discussed in some detail later in this chapter.

Racial/ Ethnic Bias. One form of clinician bias is racial and/or ethnic bias. Racial and ethnic biases can impede clinicians' abilities to accurately diagnose and treat clients cross-culturally (Gordon, Brattole, Wingate, & Joiner, 2006; Seng, Kohn-Wood, & Odera, 2005). Racial and ethnic biases can affect clinicians accurately diagnosing BPD and ASPD (Gordon et al., 2006; Seng et al., 2005).

To avoid racial or ethnic biases impacting clinicians' ability to accurately diagnose BPD, clinicians must be cognizant of how emotional expression varies from culture to culture. For example, African-American women tend to be more expressive emotionally and vocal in comparison to European-American women (Durik et al., 2006). African-American women may be seen as emotionally labile due to their increased emotional expressiveness. The emotional expressiveness of African-American women may be pathologized due to emotional lability being seen as a DSM-5 criterion for BPD (Dixon et al., 2016). Pathologizing emotional lability in African-American women could potentially lead African-American women being seen as meeting diagnostic criteria for BPD, even though their emotional expression does not cause distress or impairment for them or others within their culture.

Racial and ethnic biases also need to be controlled for when diagnosing ASPD. African Americans have a higher likelihood of receiving an ASPD diagnosis than

individuals of European descent (Iwamasa, Larrabee, & Merritt, 2000). These biases may be due to stereotypes of African Americans as being dangerous and violent (Oliver, 2003). These stereotypes can lead clinicians to interpret innocent behavior as dangerous.

Clinicians can avoid relying on racial or ethnic biases when diagnosing BPD and ASPD cross-culturally. One step to avoid these biases when diagnosing clients is to determine whether their clients come from either an individualistic or collectivistic culture. Knowing if their clients come from individualistic or collectivistic cultures will help clinicians to gain a better understanding of how their clients' cultural values affect symptom presentation (Jani, Johnson, Banu, & Shah, 2016). By understanding clients' cultural values, clinicians can determine what protective factors and/or risk factors that are more likely to be present (Jani et al., 2016). Another recommendation when working with clients cross-culturally is using clients' family members' behaviors as potential baselines for what is culturally appropriate and acceptable behavior (Jani et al., 2016). Having a gauge of culturally appropriate and acceptable behaviors within a client's culture can be helpful in determining what symptoms can be attributed to culture and what symptoms can be attributed to pathological behavior.

Sexual Orientation Bias. Clinician bias can also result due to the biases that clinicians hold regarding the sexual orientation of their clients. In some situations, biases that clinicians may hold regarding gender norms interact with biases clinicians have regarding sexual orientation to impact the diagnosis a clinician assigns to clients. For example, homosexual males have a greater likelihood of receiving a BPD diagnosis than heterosexual males (Eubanks-Carter & Goldfried, 2006; Zubenko, George, Soloff, &

Schulz, 1987). The discrepancy that exists with the diagnosis of BPD between heterosexual and homosexual males may be due to homosexual males' behaviors not aligning with traditional gender norms; such as being seen as more pathological by clinicians (Eubanks-Carter & Goldfried, 2006; Zubenko et al., 1987). It may also be easier to recognize the presentation of BPD in homosexual males, as they may express symptoms in a way that is more congruent with a clinician's view of the disorder. Clinicians may also be more comfortable in diagnosing a 'woman's disorder' in a man who engages in behavior that is viewed as more 'feminine'.

Gender Bias. Gender bias may also impact clients receiving appropriate treatment. One way in which gender bias may impact diagnosis is from clinicians not taking into account how gender expression of diagnoses may vary (Viljoen et al., 2015). In order for clinicians to control the impact of gender bias on their diagnoses, clinicians should have awareness that gender can impact the etiology, responses to treatment, and the onset of psychological disorders (Braamhorst et al, 2015). Clinicians who understand how gender bias can impact the facilitation of mental health treatment will be more apt to avoid gender bias when treating a client.

One way to minimize gender bias is to gather information about assumptions clinicians and clients have about gender roles (Knudson-Martin & MacFarlane, 2003). Another way to minimize gender bias is to take into consideration how clients' gender identities can impact their coping mechanisms during times of distress (Jani et al., 2016). Clinicians who fail to control for gender bias in a therapeutic setting can lead to treatment being facilitated in a way that may inadvertently promote gender bias (Knudson-Martin

& MacFarlane, 2003). Another source of gender bias can in the DSM-5 criteria itself. Because criteria may focus on one gender's presentation of a disorder more than the others, clinicians are led to make assumptions about their clients' presentation that may lead them to diagnosing one gender with certain disorders than the other.

Specifically, the DSM-5 diagnostic criteria for both ASPD and BPD may have underlying gender biases (Samuel & Widiger, 2009). BPD may have gender biases inherent in the criteria, making it more likely to be diagnosed in women than men (Braamhorst et al, 2015; Becker & Lamb, 1994; Silberschmidt, Lee, Zanarini, Schulz, 2015; Sansone & Sansone, 2011). For example, impulsivity is the only criterion for BPD that does not appear to occur in women more than men (Boggs, Morey, & Shea, 2005). Because the criteria for BPD is focused around behaviors which are more likely to be expressed in women than men, determining how the expression of BPD looks in males may be difficult for clinicians (Boggs et al., 2005). In addition, because of gendered criteria for BPD, BPD may be inappropriately and overly diagnosed in women (Shaw & Proctor, 2005). The diagnosis of BPD may overpathologize a woman's distress. Shaw & Proctor (2005) assert that the context of a woman's distress, especially in a society in which misogyny and gender inequality exists, is often ignored. As a result, the woman is deemed pathological rather than the environment that led to that woman's distress as being pathological (Shaw & Proctor, 2005).

Similar to gender biases in the diagnostic criteria for BPD, the diagnostic criteria for ASPD may have inherent gender biases. The gender biases inherent in the ASPD criteria may make men more susceptible to be given an ASPD diagnosis (Jane et al.,

2007). ASPD diagnostic criteria that are inherently biased toward men include failure to conform to societal norms, irritability and aggressiveness, and disregard for safety of others (Jane et al., 2007). The gender biases in the diagnostic criteria for ASPD can be an explanation for why clinicians are more confident with giving men an ASPD diagnosis than women (Crosby & Sprock, 2004). As a result, males are more likely to receive an ASPD diagnosis than females even if males and females present with the same symptoms (Crosby & Sprock, 2004; Garb, 1997).

Setting Bias. The setting in which the client is being treated can also impact a clinician's view of his/her/their client's diagnosis. ASPD is the highest occurring personality disorder in both criminal and civil correctional settings (Rotter, Way, Steinbacher, Sawyer, & Smith, 2002). In addition, clinicians in forensic settings may have an increased likelihood of diagnosing their client's with ASPD (Stevens, 1994). With the prevalence of ASPD diagnoses in correctional settings being high, it is important to consider whether these diagnoses are based on diagnostic criteria for ASPD or if setting bias is influencing clinicians to diagnose their clients with ASPD.

One DSM-5 criterion for ASPD includes "failure to conform to social norms with respect to lawful behaviors, as indicated by repeatedly performing acts that are grounds for arrest" (American Psychiatric Association, p. 659). The DSM-5 criteria for ASPD suggests that repeatedly having contact with a correctional setting can potentially be a sign of ASPD. These criteria may lead clinicians who are treating clients in a correctional setting to assume that their clients will meet diagnostic criteria for ASPD because they were charged or convicted with committing a crime more than should be

expected based on a single criterion. As a result of this assumption, clinicians in correctional settings may be influenced by setting bias when diagnosing their clients. Setting bias can potentially play a role in the diagnosis, treatment, and conceptualization of a client, but it may also impact the mental health treatment that a client receives. For example, setting bias in correctional settings may lead to inmates having a greater likelihood of receiving treatment for ASPD due to ASPD being commonly associated with correctional settings.

The Current Study

The facilitation of inappropriate mental health treatment can be the result of clinician bias resulting in inaccurate diagnosis. Inaccurate diagnoses due to clinician bias may lead to the facilitation of inappropriate mental health treatment and poor prognosis for treating clients presenting concern, as the cause of the disordered behaviors that led to their incarceration are not being addressed.

The current study sought to determine whether clinician gender bias and clinician setting bias are affecting the diagnosis of ASPD and BPD amongst clients in correctional settings. Determining whether clinician gender bias and clinician setting bias are affecting the diagnosis of ASPD and BPD amongst clients in correctional settings is important in order to assure clients are receiving appropriate mental health treatment. Incarcerated individuals who receive appropriate mental health treatment may result in lower rates of recidivism.

Chapter 3

Method

Participants

Participants in this study included mental health professionals or professionals obtaining their degree from different disciplines in the mental health field (i.e., social workers, counselors, psychologists, and clinicians in training). Participants were excluded from participation in the study if they had less than two years of clinical experience in the mental health field or if they were not working in the mental health field. Participants were identified and screened using the procedure outlined below.

Descriptive statistics for demographics of participants are given in Appendix C. Of the 124 participants included in the sample, 19% of participants identified as male and 81% of participants identified as female. The majority of participants (69%) identified as Caucasian. The majority of participants had at least a Master's degree or higher, with the majority of participants (65%) holding degrees in either clinical psychology or counseling/counseling psychology. 62% of participants were in the process of completing an additional degree, most commonly in either clinical psychology or counseling/counseling psychology. 62% of participants reported having between two and five years of clinical experience. An overwhelming majority of participants (93%) reported receiving some form of diversity training, reporting an average of 46.09 hours of diversity training. 96% of participants reported their diversity training addressed gender,

whereas only 43% of participants reported their diversity training addressed criminal status.

Materials

Participants were first presented with an informed consent form. The form explained the purpose of the study and provided information about the procedures, risks, and benefits of participating in the study. Participants were asked to provide demographic information including their age, gender, race/ethnicity, highest degree earned, occupation in the mental health field, and amount of time the participant has worked in the mental health field on the Demographic Questionnaire, found in Appendix D.

This study used experimental (2x2) design, manipulating a single vignette only by gender (male or female) and setting (residential correctional setting or an inpatient psychiatric hospital). The client depicted in the vignette expressed traits of BPD that may be mistaken for ASPD traits. The four forms of the vignette are included in Appendix E. After reading the vignette, participants were asked to complete a questionnaire (see Appendix F). The participant selected either an ASPD or BPD diagnosis for the client. Following providing a diagnosis for their fictional client, participants were asked about the impact the setting in which the fictional client was being treated had on their diagnostic decision making. Other questions, such as the diversity training the participant has received was also collected and will be considered in the discussion section, if relevant.

Procedure

Upon reviewing the initial research proposal, the Wright State University Institutional Review Board (IRB) determined the study was exempt from IRB oversight. All individuals in the study participated on a voluntary basis. They were recruited using an email blast to directors of various mental health agencies and universities with mental health training programs. An invitation to participate in the research study, along with a link to the research study, was distributed through the email blast. The invitation to participate in the research study alerted potential participants that their names would be placed in a drawing where they would be randomly selected to win \$50 if they completed the study. The research study was programmed using Qualtrics.

When participants clicked on the provided link, they were first required to complete an informed consent form and asked to select whether or not they agreed to participate in the study. If they chose not to participate in the study, they were sent to a screen that thanked them for their time and exited them from the study. If participants agreed to participate in the study, they were forwarded to the Demographic Questionnaire. The Demographic Questionnaire was displayed one question at a time. The first question of the Demographic Questionnaire was “Are you currently working in mental health and have at least two years of clinical experience?” If participant answered “No” to the first question on the Demographic Questionnaire, they met exclusionary criteria for participation in the study. Participants that met exclusionary criteria were sent to a screen that thanked them for their time. Participants who met criteria for the

participation in the study were presented with the remainder of the Demographic Questionnaire.

After completing the Demographic Questionnaire, participants were asked to read one of four randomly-assigned vignettes (See Appendix E). After reading the vignettes, participants completed the Diagnostic Assessment Questionnaire (See Appendix F). The primary author for this study considered including diagnostic criteria with the question in the Diagnostic Assessment Questionnaire “Does this individual look more like a client with Antisocial Personality Disorder or Borderline Personality Disorder?” However, given that many clinicians may not review diagnostic criteria when making a diagnosis in clinical settings, it was decided not to include it with the question. After completing the Diagnostic Assessment Questionnaire, participants were sent to a screen that thanked them for their time and provided them with the option to enter their email addresses to be entered into the drawing for \$50. The link for participation in the study remained active for six months.

The link for participation was sent in two waves of email blasts to directors of various mental health agencies and training directors of mental health training programs. Programs were randomly selected based on several Google searches with the following phrases: “community mental health agencies,” “accredited clinical psychology programs,” “accredited master’s in social work programs,” “accredited counseling psychology programs,” “accredited marriage and family therapy programs.” The contact information was gathered during the Google searches. Altogether, 264 clinical psychology programs, 71 counseling psychology programs, 93 marriage and family

therapy programs, 75 social work programs, and 282 community mental health mental health professionals were contacted. The first wave lasted a period of four months, during which 573 emails were sent. The second wave lasted two months, with 142 emails being disseminated. As a result of the two waves, 124 participants participated in the study.

Upon closing the study, two lists of participants who chose to participate in a drawing for the \$50 Visa gift card was collected, along with the contact information they provided when they agreed to be part of the drawing. A separate list was generated for each of the two waves. One participant was randomly selected from each of the two lists to receive the \$50 Visa gift card. The winners of the draw were sent an electronic \$50 Visa gift card through GiftCards.com.

After data was collected for the study, the data from the questionnaire was downloaded from Qualtrics. Each participant's responses were from the Demographic Questionnaire and the Diagnostic Assessment Questionnaire were downloaded from Qualtrics. Afterwards, each participant's responses were assigned a number to maintain his/her/their anonymity. To further ensure the anonymity of participants, data downloaded from Qualtrics did not include the collection of IP addresses of participants in the study. The data downloaded from Qualtrics was stored on a flash drive. The flash drive was labeled and stored in a locked cabinet in the author's dissertation advisor's office. The data will be deleted from Qualtrics and the flash drive five years after data collection.

Design and Analysis

The current study is a quasi-experimental, 2 (inpatient-correctional setting or inpatient-psychiatric setting) x 2 (male, female) between-subjects design. A statistician at the Statistical Consulting Center at Wright State University provided professional consultation and assistance with the analyses of these results. SAS version 9.4 (SAS Institute Inc., Cary, NC) was used for all analyses and a level of significance of $\alpha = 0.05$ was used throughout.

A power analysis for a factorial ANOVA with four groups was conducted before collecting data to determine a sufficient sample size for this study. Based on using an alpha of 0.05, a power of 0.80, and a medium effect size ($f = 0.4$), the desired sample size for an ANOVA was 179. A power analysis for a χ^2 test was conducted to determine a sufficient sample size. Based on using an alpha of 0.05, power of 0.80, a medium effect size ($w = 0.3$) and 3 degrees of freedom, the desired sample to reliably find an effect using a χ^2 analysis is 122.

Post hoc power analyses were conducted using the software package, GPower (Faul, Erdfelder, Buchner, & Lang, 2009). The sample size of 124 was used for the statistical power analyses. The alpha level used for this analysis was $p < .05$. The post hoc analyses revealed the statistical power for this study was 0.9 for detecting a medium effect using logistic regression, whereas the power exceeded 0.9 for the detection of a moderate to large effect size. Thus, there was more than adequate power (i.e., power > .80) at the moderate to large effect size level. Another post hoc power analysis revealed with power ($1 - \beta$) set at 0.25 and $\alpha = 0.05$, two-tailed, the sample size of approximately

42 was needed to reach statistical effect at the 0.05 level using an upper-tailed binomial test of proportions.

Chapter 4

Results

A statistician at the Statistical Consulting Center at Wright State University provided professional consultation and assistance with the analyses of these results. SAS version 9.4 (SAS Institute Inc., Cary, NC) was used for all analyses and a level of significance of $\alpha = 0.05$ was used throughout.

Mental health professionals were given one of four vignettes describing a client with BPD. The only differences in the vignettes were the gender of the client (male or female) and the treatment setting (inpatient-correctional setting or inpatient-psychiatric setting). The mental health professionals were asked several questions regarding the vignette and were also asked to diagnose the client as either BPD or ASPD.

RQ1: Does the Gender of the Client and/or the Treatment Setting Influence Whether a Clinician Assigns a BPD or ASPD Diagnosis to a Client?

Research Question One (RQ1) was “Does gender and setting influence whether a clinician assigns a BPD or ASPD diagnosis to a client?” One hypothesis was that the gender of the client impacted the diagnosis a participant might assign to a client, such that male clients would be more likely to receive an ASPD diagnosis and female clients would be more likely to receive a BPD diagnosis when presenting with the same symptomatology. A second hypothesis was that setting in which the client was being diagnosed would impact the diagnosis a participant assigned. Clients in an inpatient-

psychiatric setting would be more likely to receive a BPD diagnosis, whereas clients in an inpatient-correctional setting would be more likely to receive an ASPD diagnosis. The question used from the questionnaire to answer RQ1 was “Does this individual look more like a client with Antisocial Personality Disorder or Borderline Personality Disorder?” Originally, two χ^2 analysis were proposed to be used to determine whether the number of participants who gave a BPD diagnosis or ASPD diagnosis changed depending upon setting (inpatient psychiatric vs. inpatient correctional) and to examine whether gender (male vs. female) impacted the diagnosis assigned. Upon consultation with a statistician, logistic regression was determined to be more appropriate to answer RQ1. To answer RQ1, a logistic regression was used to model the probability of a diagnosis (BPD or ASPD) as the dependent variable and Gender and Treatment Setting as independent variables.

There was not sufficient evidence to suggest there is a two-way interaction between Gender and Treatment Setting ($X^2(1, N=99) = 0.23, p = 0.63$). This implies that any significant relationship between one independent variable and the dependent variable is constant across both categories of the other independent variable. Therefore, the main effects of Gender and Treatment Setting can be directly interpreted. Frequencies for each of the two variables are given below in Tables 1 and 2

Table 1

Frequency of Diagnosis by Gender

| | Antisocial Personality Disorder | Borderline Personality Disorder | Total |
|---------------|---------------------------------------|---------------------------------------|-------|
| Male Client | 10 | 49 | 59 |
| Female Client | 6 | 34 | 40 |
| Total | 16 | 83 | 99 |

Note. Frequency of participants who did not provide a diagnosis= 25.

Table 2

Frequency of Diagnosis by Treatment Setting

| | Antisocial Personality Disorder | Borderline Personality Disorder | Total |
|--------------|---------------------------------------|---------------------------------------|-------|
| Residential | 5 | 49 | 54 |
| Correctional | 11 | 34 | 45 |
| Total | 16 | 83 | 99 |

Note. Frequency of participants who did not provide a diagnosis= 25.

There was not sufficient evidence to suggest there is a significant relationship between Gender and Diagnosis ($\chi^2(1, N=99) = 0.18, p = 0.67$). There is strong evidence to suggest there is a significant relationship between Treatment Setting and Diagnosis

($X^2(1, N=99) = 4.01, p = 0.045$). The estimated odds ratio was 3.23. This means that the odds of a client in a correctional setting being diagnosed with Antisocial Personality Disorder are 3.23 times the odds of a client in a residential setting, regardless of Gender. A 95% confidence interval for the true odds ratio in the population of all such clients is (1.03, 10.21). This means the true odds ratio could feasibly be as little as 1.03 times higher or as much as 10.21 times higher for a correctional setting compared to a residential setting.

RQ2: Does the Gender of the Client and/or Treatment Setting Affect a Clinician's Belief of How Competent He or She is in Assessing the Client?

Research Question Two (RQ2) was “Does gender of client and/or treatment setting affect a clinician’s belief of how competent he/she/they is in assessing the client?” The hypothesis was gender would impact how competent a clinician believed he/she/they would be in assessing the client, such that participants would feel more competent assessing female clients than male clients. Another hypothesis was setting would impact how competent a clinician believed he/she/they was in assessing the client, such that participants would feel more competent assessing clients in an inpatient setting than in a correctional setting. Finally, another hypothesis was that there would be an interaction between gender and setting to influence how competent clinicians believed they were in treating clients, such that participants given the vignette about a male client in a correctional setting would report that they were less competent in assessing that client than participants who are given the other vignettes. The data from the question “How competent do you believe you are with assessing this client?” (1=Extremely Competent;

2=Moderately Competent; 3=Slightly Competent; 4=Neither Competent nor Incompetent; 5=Slightly Incompetent; 6=Moderately Incompetent; 7= Extremely Incompetent) from the questionnaire was analyzed to examine these hypotheses. Factorial ANOVA and post-hoc analyses demonstrated whether a significant mean difference existed between each groups' view of how competent they believed they were with assessing the assigned client.

A two-way ANOVA was run to answer this question, with Competence as the dependent variable and Gender and Treatment Setting as independent variables. There was not sufficient evidence to suggest there is a significant interaction between Gender and Treatment Setting ($F(1, 99) = 2.51, p = 0.12$), so the main effects can be directly interpreted. Descriptive statistics for Competence broken down by Gender and Treatment Setting are given below in Tables 3 and 4.

Table 3

Descriptive Statistics for Competence by Gender

| Vignette Gender | N | Mean | Std. Dev | Minimum | Maximum |
|-----------------|----|------|----------|---------|---------|
| Male Client | 59 | 2.66 | 1.15 | 1.00 | 6.00 |
| Female Client | 41 | 2.39 | 1.07 | 1.00 | 6.00 |

Table 4

Descriptive Statistics for Competence by Treatment Setting

| Vignette Setting | N | Mean | Std. Dev | Minimum | Maximum |
|------------------|----|------|----------|---------|---------|
| Residential | 55 | 2.56 | 1.05 | 1.00 | 6.00 |
| Correctional | 45 | 2.53 | 1.22 | 1.00 | 6.00 |

There was not sufficient evidence to suggest there is a significant mean difference in perceived competence between clinicians diagnosing male clients and clinicians diagnosing female clients ($F(1, 99) = 1.40, p = 0.24$). There also was not sufficient evidence to suggest there is a significant mean difference in perceived competence between clinicians diagnosing clients in a correctional setting and clinicians diagnosing clients in a residential setting ($F(1, 99) = 0.00, p = 0.95$). Frequencies for why the clinicians felt competent are given in Table 5.

Table 5

Reasons for Perceived Competence

| Reasons for Perceived Competence | Frequency | Row N % |
|----------------------------------|-----------|---------|
| Continuing Education Works | 24 | 24.0% |
| Consultation | 38 | 38.0% |
| Independent Study | 17 | 17.0% |
| Training | 65 | 65.0% |
| Clinical Experience | 78 | 78.0% |
| Coursework | 56 | 56.0% |

Note. Total count does not equal 100% due to some participants choosing multiple reasons for perceived competence.

RQ3: Does the Gender of the Client and/or the Treatment Setting Affect Clinicians' Comfort with Assessing the Client?

Research Question Three (RQ3) read as “Does gender of client and treatment setting affect clinicians’ comfort with assessing a client?” The hypothesis was that gender would impact how comfortable a clinician believed he/she/they would be in assessing the client, such that participants would feel more comfortable assessing female clients than male clients. Another hypothesis was setting would impact how comfortable a clinician believed he/she/they will be in assessing the client, such that participants would feel more comfortable assessing clients in an inpatient setting than in a correctional setting. Finally, another hypothesis was that there will be an interaction

between gender and setting to influence how comfortable clinicians believed they would be in treating clients, such that participants given the vignette about a male client in a correctional setting would report that they were less comfortable in assessing that client than participants who were given the other vignettes.

The data used to answer the RQ3 was answers to the questionnaire item “How comfortable would you be with assessing a client in this setting?” ((1=Extremely Comfortable; 2=Moderately Comfortable; 3=Slightly Comfortable; 4=Neither Comfortable nor Uncomfortable; 5=Slightly Uncomfortable; 6=Moderately Uncomfortable; 7= Extremely Uncomfortable)). A factorial ANOVA was used to determine whether the mean difference amongst each groups’ view of how competent they believed they would be with assessing the assigned client was significantly different from each other.

A two-way ANOVA was run to answer this question, with Comfort Level as the dependent variable and Gender and Treatment Setting as independent variables. There was not sufficient evidence to suggest there is a significant interaction between Gender and Treatment Setting ($F(1, 98) = 1.65, p = 0.20$), so the main effects can be directly interpreted. Descriptive statistics for Comfort Level broken down by Gender and Treatment Setting are given below in Tables 6 and 7.

Table 6

Descriptive Statistics for Comfort Level by Gender

| Vignette Gender | N | Mean | Std. Dev | Minimum | Maximum |
|-----------------|----|------|----------|---------|---------|
| Male Client | 59 | 3.02 | 1.48 | 1.00 | 6.00 |
| Female Client | 40 | 2.73 | 1.40 | 1.00 | 6.00 |

Table 7

Descriptive Statistics for Comfort Level by Treatment Setting

| Vignette Setting | N | Mean | Std. Dev | Minimum | Maximum |
|------------------|----|------|----------|---------|---------|
| Residential | 54 | 3.00 | 1.43 | 1.00 | 6.00 |
| Correctional | 45 | 2.78 | 1.48 | 1.00 | 6.00 |

There was not sufficient evidence to suggest there is a significant mean difference in Comfort Level between clinicians diagnosing male clients and clinicians diagnosing female clients ($F(1, 98) = 0.97, p = 0.36$). There also was not sufficient evidence to suggest there is a significant mean difference in Comfort Level between clinicians diagnosing clients in a correctional setting and clinicians diagnosing clients in a residential setting ($F(1, 98) = 0.47, p = 0.49$).

RQ4: Do Clinicians Believe Gender of Client and Treatment Setting Influence the Diagnosis that They Assign to a Client?

Research Question Four (RQ4) was “Do clinicians believe gender of client and treatment setting influence the diagnosis that they assign to a client?” The hypothesis was that participants would not report gender or setting biases they may have when

diagnosing a client. The questions used from questionnaire to answer RQ4 were “Do you think the setting in which the client was being treated impacted your diagnosis?” and “If you saw these same traits in a client of the opposite gender of the one depicted, would this change your diagnosis?” Originally, two χ^2 analysis was proposed to be used to answer RQ4. One χ^2 analysis was going to be used to compare the number of participants who agreed gender influenced their diagnosis with participants who disagreed gender influenced their diagnosis. Another χ^2 analysis was going to be used to compare the number of participants who agreed treatment setting influenced their diagnosis with participants who disagreed that treatment setting influenced their diagnosis. The analyses were going to be used to examine whether the difference between whether participants viewed setting or gender as influential in the diagnosis they assigned was statistically significant.

The statistical consultant suggested that an upper-tailed binomial test of proportions was a more appropriate method to answer RQ4. In order to answer RQ4, the research question was separated into two questions for the purposes of analysis: “Do the Majority of Clinicians Believe the Treatment Setting Influences the Diagnosis They Assign to a Client?” and “Do the Majority of Clinicians Believe the Treatment Setting Influences the Diagnosis They Assign to a Client?” An upper-tailed binomial test of proportions was run to answer the first of the two questions, with the alternative hypothesis being that the proportion of clinicians who believed gender influenced the diagnosis they assign to a client is greater than 0.5. Another upper-tailed binomial test of proportions was run to answer the first of the two questions, with the alternative

hypothesis being that the proportion of clinicians who believed setting influenced the diagnosis they assign to a client is greater than 0.5.

Do the Majority of Clinicians Believe the Gender of a Client Influences the Diagnosis they Assign to a Client? An upper-tailed binomial test of proportions was run to answer this question, with the alternative hypothesis being that the proportion of clinicians who believe gender influences the diagnosis they assign to a client is greater than 0.5. Frequencies are given below in Table 8.

Table 8

Frequencies for Clinicians who Believe Gender is Influential in Diagnosis

| Gender Impactful | Frequency | Percent | Cumulative | Cumulative |
|------------------|-----------|---------|------------|------------|
| | | | Frequency | Percent |
| Yes | 13 | 13.13 | 13 | 13.13% |
| No | 86 | 86.87 | 99 | 100.00% |

Note. Frequency of participants who did not provide a response = 24.

There is not sufficient evidence to suggest that the majority of clinicians believe Gender is influential in their diagnosis ($z = -7.34, p = 0.99$). 13% of the clinicians in this data set felt Gender was influential.

Do the Majority of Clinicians Believe the Treatment Setting Influences the Diagnosis They Assign to a Client? Another upper-tailed binomial test of proportions was run for this question, with the alternative hypothesis being that the proportion of clinicians who believe setting influences the diagnosis they assign to a client is greater than 0.5. Frequencies are given in Table 9.

Table 9

Frequencies for Clinicians who Believe Setting is Influential in Diagnosis

| Setting Impactful | Frequency | Percent | Cumulative | Cumulative |
|-------------------|-----------|---------|------------|------------|
| | | | Frequency | Percent |
| Yes | 29 | 29.29 | 29 | 29.29% |
| No | 70 | 70.71 | 99 | 100.00% |

Note. Frequency of participants who did not provide a response = 24.

There is not sufficient evidence to suggest that the majority of clinicians believe Treatment Setting is influential in their diagnosis ($z = -4.12, p = 0.99$). 29% of the clinicians in this data set felt Treatment Setting was influential.

RQ5: Does the gender of the client and/or treatment setting influence how clinicians describe their clients?

Research Question Five (RQ5) was “Does the gender of the client and treatment setting influence how clinicians describe their clients?” The hypothesis was that gender would influence how clinicians described their clients, such that participants who had a male client would be more likely to describe their clients with adjectives associated with ASPD. Another hypothesis is that setting influenced how clinicians described their clients. Participants who had a client who was in a correctional setting would be more likely to describe their client with adjectives associated with ASPD. The question that was used from questionnaire to answer RQ5 was “Which of the following would you use to describe the client? Choose as many that you believe apply.” Clinicians were given

fifteen descriptive words or phrases with which to describe their clients. Two of them were specific to BPD (Emotionally Dysregulated and Interpersonal Instability) while four were specific to ASPD (Arrogant, Criminal, Dangerous, and Physically Aggressive). One of them, Impulsive, can relate to either condition and was not included in the analysis. The other eight phrases described neither condition. A clinician's response was considered to be correct if they selected the two BPD descriptors and none of the ASPD descriptors. The neutral descriptors were counted neither for nor against them.

Originally, two χ^2 analyses were going to be used to answer RQ5. One χ^2 analysis was going to be used to compare the number of participants who gave ASPD descriptors to describe their client's diagnosis with the number of participants who gave BPD descriptors to describe their client. A separate χ^2 analysis was going to be conducted for setting (inpatient vs. correctional) and gender (male vs. female) to examine whether setting or gender impacted the frequency with which each descriptor was assigned. After consultation with the statistician it was decided that a logistic regression would more accurately answer RQ5, with the status of the answer (Correct or Incorrect) as the dependent variable and Gender and Treatment Setting as the independent variables.

The results of correct and incorrect responses by Gender and Treatment Setting are given below in Tables 10 and 11. Frequencies for each of the fifteen response options by type of vignette are given in Appendix G.

Table 10

Frequencies for Responses to Descriptive Words and Phrases by Gender

| <u>Vignette Gender</u> | <u>Correct</u> | | Total |
|------------------------|----------------|----|-------|
| | Yes | No | |
| Male Client | 9 | 50 | 59 |
| Female Client | 8 | 34 | 42 |
| Total | 17 | 84 | 101 |

Table 11

Frequencies for Responses to Descriptive Words and Phrases by Setting

| <u>Vignette Setting</u> | <u>Correct</u> | | Total |
|-------------------------|----------------|----|-------|
| | Yes | No | |
| Residential | 10 | 45 | 55 |
| Correctional | 7 | 39 | 46 |
| Total | 17 | 84 | 101 |

A logistic regression was run to answer this question, with the status of the answer (Correct or Incorrect) as the dependent variable and Gender and Treatment Setting as the independent variables. There was not sufficient evidence to suggest there is a significant interaction between Gender and Treatment Setting ($\chi^2(1, N=101) = 2.92$, $p = 0.09$), so the main effects were analyzed directly. There was not sufficient evidence to

suggest there is a significant relationship between Gender and whether clinicians described the client correctly ($\chi^2(1, N=101) = 0.28, p= 0.59$). Nor was there sufficient evidence to suggest there is a significant relationship between Treatment Setting and whether they described the client correctly ($\chi^2(1, N=101) = 0.19, p= 0.66$).

Chapter 5

Discussion

The present research is important to work toward improving mental health treatment in correctional settings. Determining whether clinician gender bias and clinician setting bias are affecting the diagnosis of ASPD and BPD amongst clients in correctional settings is important in order to assure clients are receiving appropriate mental health treatment. If clients are receiving inaccurate diagnoses, they may in return be receiving inappropriate treatment for their presenting mental health issues. By providing them with the correct diagnoses, they may be more likely to receive appropriate mental health treatment. In turn, the appropriate treatment may result in lower rates of recidivism.

The objective of the study was to determine whether clinician gender bias and clinician setting bias are affecting the diagnosis of ASPD and BPD amongst clients in correctional settings. The present study was based on responses from a sample of 124 mental health professionals with at least two years of clinical experience. This study presented participants with a vignette of a client that expressed traits of BPD that may be mistaken for ASPD traits. Participants were asked to diagnose the fictional client and were asked several questions related to their diversity training, comfort level with diagnosing the client, and their awareness of whether gender and/or setting biases

affected their diagnoses. Several key conclusions can be drawn from the data analysis to determine if and how clinician gender bias and clinician setting bias impact the diagnosis of ASPD and BPD in correctional settings.

Surprisingly, gender did not appear to impact diagnosis. One explanation for this finding is that gender bias may not influence the diagnosis of ASPD and BPD in correctional settings. This null finding will be explored in the limitations section.

The only finding that was of statistical significance was the impact setting had on the diagnosis participants assigned. Participants were over three times more likely to diagnose ASPD for fictional clients in a correctional setting, regardless of gender. This finding was contradicted by the finding that participants did not believe setting influenced their diagnosis. This contradiction highlights the lack of insight clinicians may have regarding their implicit biases and how they affect diagnostic decision making.

A potential reason for why setting bias was found to be significant and gender bias was found to be insignificant may be due to setting bias generating a stronger reaction from clinicians than gender bias. The description of each setting in the vignette may have done an adequate job in evoking setting biases participants may hold. For example, the description of the settings may have elicited a strong reaction from participants due to the wording in the vignette being more specific to each setting. For example, words such as “sentenced,” “incarcerated,” and “jail” were used in the correctional vignette which could evoke a clear picture, and potential implicit and explicit biases of correctional settings. Similarly, words specific to residential settings such as

“admitted” and “psychiatric facility” used in the residential vignette may elicit biases participants may have toward residential treatment settings.

The quality of diversity training clinicians are currently receiving is highlighted in the findings. According to the findings, addressing criminal status is often not included when facilitating diversity training. An overwhelming majority of participants had not received diversity training that addressed criminal status. Criminal justice system involvement is a social identity that is stigmatized (Moore & Tangney, 2017). Addressing criminal justice system involvement in diversity training could potentially help with decreasing the clinician bias of diagnosing ASPD in correctional settings. Incorporating criminal status in diversity training could help clinicians gain exposure to other conceptualizations of criminal behavior.

A finding that was showcased in the data was how participants may misperceive their competence. Table 12 reports participants’ who diagnosed their fictional client with ASPD perceived competence with working with their fictional clients. The majority of participants who diagnosed their fictional clients with ASPD rated themselves as moderately competent or extremely competent.

Table 12

Perceived Competence by Participants who Diagnosed ASPD

| | Frequency | Percent |
|------------------------|-----------|---------|
| Extremely competent | 1 | 6.3% |
| Moderately competent | 8 | 50.0% |
| Slightly competent | 6 | 37.5% |
| Moderately incompetent | 1 | 6.3% |
| Total | 16 | 100.0% |

Perceived competence is not necessarily related to current clinical experience. Table 13 suggests the majority of participants who diagnosed their fictional clients with ASPD were not working in either a correctional or residential setting at the time of the survey. However, Table 14 suggests the participants who diagnosed their fictional client with ASPD attributed their perceived competence mostly to previous clinical experience. It is important to recognize where this overestimation of competence is stemming from and whether it was reinforced by training or clinical experiences received in the past

Table 13

Setting in Which Those Who Assigned an ASPD Diagnosis Work in

| | Community Mental Health | Correctional | Hospital | Private Practice | Residential Facility | School | Other | Total |
|---------|-------------------------------|--------------|----------|---------------------|-------------------------|--------|-------|-------|
| N | 3 | 1 | 5 | 5 | 0 | 4 | 2 | 16 |
| Percent | 18.75% | 6.25% | 32.25% | 31.25% | 0% | 25% | 12.5% | 100% |

Note. Count is higher than 16 due to participants having the ability to select more than one answer.

Table 14

Reasons for Perceived Competence by Participants who Diagnosed ASPD

| | N |
|--------------------------------|----|
| Continuing education workshops | 4 |
| Consultation | 6 |
| Independent study | 4 |
| Training | 11 |
| Clinical experience | 12 |
| Coursework | 9 |

Findings also provide further information regarding how length of education and experience impacted the accuracy of diagnosis. Table 15 and Table 16 highlight the

amount of education nor licensure status does not impact the accuracy of diagnosis with Bachelor’s level clinicians and doctoral level clinicians assigned the diagnosis of ASPD at the same frequency. These findings highlight the importance of providing trainees with quality and accurate training experiences.

Table 15

Frequencies for Diagnosis and Highest Degree Completed

| Diagnosis | Bachelor's | Master's | Doctorate | Professional | Total |
|--|------------|----------|-----------|--------------|-------|
| Antisocial Personality Disorder | | | | | |
| Disorder | 3 | 10 | 3 | 0 | 16 |
| Borderline Personality Disorder | | | | | |
| Disorder | 14 | 54 | 15 | 0 | 83 |
| Total | 17 | 64 | 18 | 0 | 99 |

Table 16

Frequencies for Diagnosis and Participants Licensure Status

| Diagnosis | Licensed | | Total |
|---------------------------------|----------|----|-------|
| | Yes | No | |
| Antisocial Personality Disorder | 7 | 9 | 16 |
| Borderline Personality Disorder | 24 | 59 | 83 |
| Total | 31 | 68 | 99 |

Limitation of the Study and Future Directions

This study has several limitations that impact the applicability of the results to all mental health professionals. One limitation of the study is the small amount of BPD descriptors that were included in the first question of the Diagnostic Assessment Questionnaire. Since there were more descriptors related to ASPD than BPD, it may bias the results by allowing participants with greater opportunity to use ASPD descriptors. As a result of this, the results may be skewed in that more participants used ASPD descriptors since there was not a variety of BPD descriptors to choose.

Another limitation of the study is the standardization of the vignette used in the study. Symptoms of ASPD and BPD can look different for both male and female clients (Sansone & Sansone, 2011). Due to the varying ways in which ASPD and BPD are expressed across genders, a challenge of this study was developing a vignette of a fictional client in which the symptoms the client was expressing can be applied across genders. As a result, the vignette was designed to depict a client who clearly meets criteria for BPD. However, in the “real world” diagnostic decision making usually is not as clear. By having a client depicted in the vignette that clearly meets diagnostic criteria for BPD, it potentially takes away from accounting for confounding variables that impact the accuracy of diagnostic decision making in real-life settings.

An additional limitation of the study was the decision to use the same symptom presentation of BPD for males and females, with the only difference between the two vignettes being the gender of the client. Simply changing one word (female to male) may not have been salient enough to activate gendered schemas for therapists in the same way

as having a client present. To control for this limitation, it may be helpful to use an audio or video example of a fictional client for in future research. Each audio/video example would have either a male or female client express first-hand their mental health concerns. Similar to the written vignettes, these files would depict a fictional client who meets criteria for BPD.

Due to not receiving enough responses to generate statistical significance of the data, another limitation of the study is that certain statistical analyses were underpowered. Specifically, analyses for whether gender of the client and/or treatment setting impacted participants comfort and perceived competence were found insignificant. However, these analyses were underpowered. Having an underpowered study, means that the study's ability to generate statistically significant data to determine whether biases are impacting diagnoses in correctional settings is compromised. As a result of having an underpowered study, the participants' results may not be an accurate representation of clinicians' levels of comfort and competence in treating these clients. These results may have been found statistically significant if the sample size had been larger. In the future, it would be beneficial collect a large enough sample in order to reliably be used to make inferences about clinician comfort and confidence in diagnosing from the results. Statistically significant data will help infer what impact clinician gender and setting bias has in diagnosing ASPD and BPD in correctional settings.

Along with gaining more data to potentially generate statistically significant data, another future direction of this study is to determine whether other types of biases are present when clinicians diagnose ASPD and BPD in corrections. ASPD and BPD

diagnoses could potentially be affected by many factors, including clinician racial/ethnic bias and clinician sexual orientation bias, as well (Dixon et al, 2016; Durik et al., 2006; Eubanks-Carter & Goldfried, 2006; Iwamasa et al., 2000; Zubenko et al., 1987).

Conducting additional studies to determine whether other types of bias are present when clinicians are diagnosing ASPD and BPD in correctional settings could provide further evidence for clinicians to engage in self-reflection to be more aware of their implicit biases when conducting clinical work. Being aware of these biases can help with promoting the facilitation of appropriate and effective mental health treatment in correctional settings.

Chapter 6

Conclusion

The current study illustrates several important factors when it comes to how clinicians bias about the setting in which they are diagnosing can impact their abilities to accurately diagnose clients. Although clinicians may try to maintain objectivity when diagnosing, there appears to be some impact of implicit bias around setting that cloud clinicians' ability to accurately diagnose.

Diversity training is essential to help clinicians obtain awareness, through self-reflection, of biases they hold. It may be irrelevant how many of hours of diversity training one receives if the diversity training is not representative of the many diverse populations and settings that are in need of mental health treatment. More work needs to be done by training programs to adequately prepare clinicians to work in a diverse society, including the settings in which clinicians will work. In particular, diversity training that involves self-reflection of implicit and explicit biases clinicians have will help with clinicians working toward not allowing these biases to impact treatment they are facilitating.

Clinicians may misperceive their levels of competence in diversity, when in actuality, they lack education and training in relevant aspects of diversity. Although clinicians in this study reported a significant number of diversity trainings, it may be that

they do not receive sufficient training regarding how legal status and setting may activate stigma and stereotypes they hold when they are conceptualizing diverse populations.

Appendix A

Borderline Personality Disorder DSM-5 Diagnostic Criteria

A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity, beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:

1. Frantic efforts to avoid real or imagined abandonment. (**Note:** Do not include suicidal or self-mutilating behavior covered in Criterion 5.)
2. A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation.
3. Identity disturbance: markedly and persistently unstable self-image or sense of self.
4. Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). (**Note:** Do not include suicidal or self-mutilating behavior covered in Criterion 5.)
5. Recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior.
6. Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).
7. Chronic feelings of emptiness.
8. Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).

9. Transient, stress-related paranoid ideation or severe dissociative symptoms
(American Psychiatric Association, 2013, p. 663).

Appendix B

Antisocial Personality Disorder DSM-5 Diagnostic Criteria

- A. A pervasive pattern of disregard for and violation of the rights of others, occurring since age 15 years, as indicated by three (or more) of the following:
- 1 Failure to conform to social norms with respect to lawful behaviors, as indicated by repeatedly performing acts that are grounds for arrest.
 - 2 Deceitfulness, as indicated by repeated lying, use of aliases, or conning others for personal profit or pleasure.
 - 3 Impulsivity or failure to plan ahead.
 - 4 Irritability and aggressiveness, as indicated by repeated physical fights or assaults.
 - 5 Reckless disregard for safety of self or others.
 - 6 Consistent irresponsibility, as indicated by repeated failure to sustain consistent work behavior or honor financial obligations.
 - 7 Lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another.
- B. The individual is at least age 18 years.
- C. There is evidence of conduct disorder with onset before age 15 years.
- D. The occurrence of antisocial behavior is not exclusively during the course of schizophrenia or bipolar disorder. (American Psychiatric Association, 2013, p. 659).

Appendix C

Demographic Descriptive Statistics

Table C1

Gender

| Gender | Frequency | Percent | Cumulative | Cumulative |
|--------|-----------|---------|------------|------------|
| | | | Frequency | Percent |
| Male | 24 | 19.35 | 24 | 19.35% |
| Female | 100 | 80.65 | 124 | 100.00% |

Table C2

Age

| Age | Frequency | Percent | Cumulative | Cumulative |
|-------|-----------|---------|------------|------------|
| | | | Frequency | Percent |
| 18-29 | 70 | 56.45 | 70 | 56.45% |
| 30-45 | 37 | 29.84 | 107 | 86.29% |
| 46-61 | 14 | 11.29 | 121 | 97.58% |
| 62+ | 3 | 2.42 | 124 | 100.00% |

Table C3

Race/Ethnicity

| Ethnicity | Percentage | Frequency |
|-------------------------------------|------------|-----------|
| Asian | 8.40% | 11 |
| African American or African descent | 11.45% | 15 |
| American Indian or Alaska native | 0.76% | 1 |
| Caucasian | 68.70% | 90 |
| Hispanic, Latino/a, or Spanish | 8.40% | 11 |
| Middle Eastern | 1.53% | 2 |
| Pacific Islander | 0.00% | 0 |
| Other | 0.76% | 1 |
| Prefer not to answer | 0.00% | 0 |
| Total | 100% | 131 |

Note. Count is higher than 124 due to participants having the ability to select more than one answer.

Table C4

Currently Working in Mental Health

| Currently Working in Mental Health | Frequency | Percent | Cumulative | Cumulative |
|------------------------------------|-----------|---------|------------|------------|
| | | | Frequency | Percent |
| Yes | 105 | 85.37 | 105 | 85.37% |
| No | 18 | 14.63 | 123 | 100.00% |

Note. Frequency of participants who did not provide a response = 1.

Table C5

Highest Degree

| Highest Degree | Frequency | Percent | Cumulative | Cumulative |
|----------------|-----------|---------|------------|------------|
| | | | Frequency | Percent |
| Bachelor's | 18 | 17.14 | 18 | 17.14% |
| Master's | 67 | 63.81 | 85 | 80.95% |
| Doctorate | 20 | 19.05 | 105 | 100.00% |

Note. Frequency of participants who did not provide a response = 19.

Table C6

Mental Health Discipline of Highest Completed Degree

| Degree | Percentage | Frequency |
|--|------------|-----------|
| Clinical psychology | 37.61% | 41 |
| Counseling or Counseling psychology | 27.52% | 30 |
| Marriage and family therapy | 8.26% | 9 |
| School psychology | 0.92% | 1 |
| Social work | 18.35% | 20 |
| Other | 7.34% | 8 |
| Total | 100% | 109 |

Note. Frequency of participants who did not provide a response=25.

Table C7

Currently Working on Additional Degree

| | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-----|-----------|---------|-------------------------|-----------------------|
| Yes | 64 | 61.54 | 64 | 61.54% |
| No | 40 | 38.46 | 104 | 100.00% |

Note. Frequency of participants who did not provide a response=20.

Table C8

Discipline of Additional Degree

| Discipline | Percentage | Frequency |
|-------------------------------------|------------|-----------|
| Behavioral analysis | 0.00% | 0 |
| Clinical psychology | 39.06% | 25 |
| Counseling or counseling psychology | 37.50% | 24 |
| Marriage and family therapy | 3.13% | 2 |
| School psychology | 0.00% | 0 |
| Social work | 7.81% | 5 |
| Other | 12.50% | 8 |
| Total | 100% | 64 |

Table C9

Current Occupation in Mental Health

| Occupation | Percentage | Frequency |
|-------------------|------------|-----------|
| Counselor | 9.77% | 13 |
| Nurse | 0.00% | 0 |
| Psychiatrist | 0.00% | 0 |
| Psychologist | 15.79% | 21 |
| Social worker | 12.03% | 16 |
| Student clinician | 34.59% | 46 |
| Therapist | 20.30% | 27 |
| Other | 7.52% | 10 |
| Total | 100% | 133 |

Note. Count is higher than 124 due to participants having the ability to select more than one answer.

Table C10

Occupational Setting

| Setting | Percentage | Frequency |
|--------------------------------|------------|-----------|
| Community mental health | 22.95% | 28 |
| Correctional | 4.92% | 6 |
| Hospital | 16.39% | 20 |
| Private practice | 18.85% | 23 |
| Residential treatment facility | 0.82% | 1 |
| School | 19.67% | 24 |
| Other (please specify) | 16.39% | 20 |
| Total | 100% | 122 |

Note. Frequency of participants who did not provide a response=2.

Table C11

Independently Licensed

| Independently Licensed | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|------------------------|-----------|---------|----------------------|--------------------|
| Yes | 33 | 31.73 | 33 | 31.73% |
| No | 71 | 68.27 | 104 | 100.00% |

Note. Frequency of participants who did not provide a response=20.

Table C12

Years of Experience

| Years of Experience | Frequency | Percent | Cumulative | Cumulative |
|---------------------|-----------|---------|------------|------------|
| | | | Frequency | Percent |
| 2-5 | 64 | 61.54 | 64 | 61.54% |
| 6-10 | 21 | 20.19 | 85 | 81.73% |
| 11-20 | 9 | 8.65 | 94 | 90.38% |
| 21-40 | 10 | 9.62 | 104 | 100.00% |

Note. Frequency of participants who did not provide a response=20.

Table C13

Diversity Training

| Diversity Training | Frequency | Percent | Cumulative | Cumulative |
|--------------------|-----------|---------|------------|------------|
| | | | Frequency | Percent |
| Yes | 96 | 93.20 | 96 | 93.20% |
| No | 7 | 6.80 | 103 | 100.00% |

Note. Frequency of participants who did not provide a response=21.

Table C14

Hours of Diversity Training

| N | Mean | Std. Dev | Minimum | Maximum |
|----|-------|----------|---------|---------|
| 94 | 46.09 | 76.67 | 2.00 | 600.00 |

Table C15

Did Training Address Gender?

| Training Addressed Gender | Frequency | Percent | Cumulative | Cumulative |
|---------------------------|-----------|---------|------------|------------|
| | | | Frequency | Percent |
| Yes | 92 | 95.83 | 92 | 95.83% |
| No | 4 | 4.17 | 96 | 100.00% |

Note. Frequency of participants who did not provide a response=28.

Table C16

Did Training Address Criminal Status?

| Training Addressed Criminal Status | Frequency | Percent | Cumulative | Cumulative |
|------------------------------------|-----------|---------|------------|------------|
| | | | Frequency | Percent |
| Yes | 41 | 42.71 | 41 | 42.71% |
| No | 55 | 57.29 | 96 | 100.00% |

Note. Frequency of participants who did not provide a response=28.

Appendix D

Demographic Questionnaire

1. Are you currently working in mental health and have at least two years of clinical experience?

Yes

No

2. What is your gender?

Male

Female

Non-binary Gender

Wish to self-define

Prefer not to answer

3. What is your age?

18-29 years old

30-45 years old

46-61 years old

62 years and older

Prefer not to answer

4. What is your ethnicity? Choose as many as apply.

Asian

African American or African Descent

American Indian or Alaska native

Caucasian

Hispanic, Latino/a, or Spanish

Middle Eastern

Pacific Islander

Other

Prefer not to answer

5. Are you currently working in mental health and have at least two years of clinical experience? Please include practicum/training experiences.

Yes

No

6. What is the highest degree or level of school you have completed? If currently enrolled, highest degree received?

Bachelor's degree (e.g., B.A., B.S., etc.)

Master's degree (e.g., M.A., M.S., MMFT, etc.)

Doctorate degree (e.g., Ph.D., Psy.D., etc.)

Professional degree (e.g., M.D., J.D., Pharm.D., etc.)

7. In what mental health discipline did you receive your highest completed degree? Pick as many that apply.

Clinical Psychology

Counseling or Counseling Psychology

Marriage and Family Therapy

School Psychology

Social Work

Other

8. Are you currently working on an additional degree?

Yes

No

9. If you are currently working on an additional degree, in what discipline is the degree?

Behavioral Analysis

Clinical Psychology

Counseling or Counseling Psychology

Marriage and Family Therapy

School Psychology

Social Work

Other

10. What is your current occupation in the mental health field? Pick as many that apply.

Counselor

Nurse

Psychiatrist

Psychologist

Social Worker

Student Clinician

Therapist

Other

11. What setting are you currently practicing mental health?

Community Mental Health

Correctional

Hospital

Private Practice

Residential Treatment Facility

School

Other

12. Are you currently independently licensed to practice mental health?

Yes

No

13. How long have you been working in mental health?

2-5 years

6-10 years

11-20 years

21-40 years

41 years or more

14. Have you ever received diversity training?

Yes

No

15. Approximately many hours of diversity training have you received?

16. If you answered yes to question 13, did your training address issues around gender?

Yes

No

17. If you answered yes to question 13, did your training address issues around criminal status?

Yes

No

Appendix E

Vignettes

Male/Residential Condition Vignette

Client is a 25-year-old, heterosexual, cisgender male. Client was recently admitted to a psychiatric inpatient facility after breaking into his ex-partner's apartment. His partner found him rummaging through her things. Once she confronted him, he threatened to kill himself if she did not take him back. His ex-partner called the police and he was admitted to a state psychiatric facility on a 72-hour hold. Client's ex-partner plans to press charges for breaking and entering.

Client grew up in a chaotic, invalidating environment. Client is an only child. His father passed away during a car accident when Client was an infant. His mother raised him by herself. His mother was verbally, emotionally, and physically abusive toward Client. She would often throw objects or curse at him if he disobeyed. The abuse got so bad that when Client was 13 years old, Child Protective Services was called by a neighbor. The neighbor noticed that Client had bruises above both of his eyes. His bruises were the result of one of Client's mother's many physical attacks against him. Client was placed in the custody of his paternal grandparents by Child Protective Services. Client lived with his grandparents up until graduating from high school.

Client met his ex-partner at 18 years of age, soon after he graduated from high school. Their relationship has been off and on. During their relationship, Client began binge drinking. He started drinking socially and then began drinking every day. He said his drinking was to mask feeling "empty inside." Client's partner described being around him like "walking on eggshells." Their good times were great, but when they were in a

rough spot in their relationship it would be tumultuous. Client was often passive aggressive and displayed resentment toward his partner. If Client's partner did what he wanted her to do, Client and his partner would get along "wonderfully." However, if Client's partner would disagree with him about anything, he would often ostracize and criticize his partner. Client was the perpetrator of domestic violence during the relationship which was what ultimately led to her leaving him.

Client has a history of legal involvement. Client has been charged with domestic violence against his ex-partner twice within their seven-year relationship. Client has also been charged with misdemeanor assault twice after being involved in a bar fight within the past year.

At the treatment facility, Client is described as being difficult to be around. He often causes commotion if he does not believe he is receiving enough attention from the staff. At times, he will find what he can to cut himself to the point of bleeding in order for staff to attend to him.

Male/Correctional Condition Vignette

Client is a 25-year-old, heterosexual, cisgender male. Client was recently incarcerated after being charged with Breaking and Entering after breaking into his ex-partner's apartment. His partner found him rummaging through her things. Once she confronted him, he threatened to kill himself if she did not take him back. His ex-partner called the police. He was ultimately sentenced to six months in jail.

Client grew up in a chaotic, invalidating environment. Client is an only child. His father passed away during a car accident when Client was an infant. His mother raised him by herself. His mother was verbally, emotionally, and physically abusive toward Client. She would often throw objects or curse at him if he disobeyed. The abuse got so bad that when Client was 13 years old, Child Protective Services was called by a neighbor. The neighbor noticed that Client had bruises above both of his eyes. His bruises were the result of one of Client's mother's many physical attacks against him. Client was placed in the custody of his paternal grandparents by Child Protective Services. Client lived with his grandparents up until graduating from high school.

Client met his ex-partner at 18 years of age, soon after he graduated from high school. Their relationship has been off and on. During their relationship, Client began binge drinking. He started drinking socially and then began drinking every day. He said his drinking was to mask feeling "empty inside." Client's partner described being around him like "walking on eggshells." Their good times were great, but when they were in a rough spot in their relationship it would be tumultuous. Client was often passive aggressive and displayed resentment toward his partner. If Client's partner did what he wanted her to do, Client and his partner would get along "wonderfully." However, if

Client's partner would disagree with him about anything, he would often ostracize and criticize his partner. Client was the perpetrator of domestic violence during the relationship which was what ultimately led to her leaving him.

Client has a history of legal involvement. Client has been charged with domestic violence against his ex-partner twice within their seven-year relationship. Client has also been charged with misdemeanor assault twice after being involved in a bar fight within the past year.

In jail, Client is described as being difficult to be around. He often causes commotion if he does not believe he is receiving enough attention from the staff. At times, he will find what he can to cut himself to the point of bleeding in order for staff to attend to him.

Female/Residential Condition Vignette

Client is a 25-year-old, heterosexual, cisgender female. Client was recently admitted to a psychiatric inpatient facility after breaking into her ex-partner's apartment. Her partner found her rummaging through his things. Once he confronted her, she threatened to kill herself if he did not take her back. Her ex-partner called the police and she was admitted to a state psychiatric facility on a 72-hour hold. Client's ex-partner plans to press charges for breaking and entering.

Client grew up in a chaotic, invalidating environment. Client is an only child. Her father passed away during a car accident when Client was an infant. Her mother raised her by herself. Her mother was verbally, emotionally, and physically abusive toward Client. She would often throw objects or curse at her if she disobeyed. The abuse got so bad that when Client was 13 years old, Child Protective Services was called by a neighbor. The neighbor noticed that Client had bruises above both of her eyes. Her bruises were the result of one of Client's mother's many physical attacks against her. Client was placed in the custody of her paternal grandparents by Child Protective Services. Client lived with her grandparents up until graduating from high school.

Client met her ex-partner at 18 years of age, soon after she graduated from high school. Their relationship has been off and on. During their relationship, Client began binge drinking. She started drinking socially and then began drinking every day. She said her drinking was to mask feeling "empty inside." Client's partner described being around her like "walking on eggshells." Their good times were great, but when they were in a rough spot in their relationship it would be tumultuous. Client was often passive aggressive and displayed resentment toward her partner. If Client's partner did what she

wanted him to do, Client and her partner would get along “wonderfully.” However, if Client’s partner would disagree with her about anything, she would often ostracize and criticize her partner. Client was the perpetrator of domestic violence during the relationship which was what ultimately led to him leaving her.

Client has a history of legal involvement. Client has been charged with domestic violence against her ex-partner twice within their seven-year relationship. Client has also been charged with misdemeanor assault twice after being involved in a bar fight within the past year.

At the treatment facility, Client is described as being difficult to be around. She often causes commotion if she does not believe she is receiving enough attention from the staff. At times, she will find what she can to cut herself to the point of bleeding in order for staff to attend to her.

Female/Correctional Condition Vignette

Client is a 25-year-old, heterosexual, cisgender female. Client was recently incarcerated after being charged with Breaking and Entering after breaking into her ex-partner's apartment. Her partner found her rummaging through his things. Once he confronted her, she threatened to kill herself if she did not take him back. Her ex-partner called the police. She was ultimately sentenced to six months in jail.

Client grew up in a chaotic, invalidating environment. Client is an only child. Her father passed away during a car accident when Client was an infant. Her mother raised her by herself. Her mother was verbally, emotionally, and physically abusive toward Client. She would often throw objects or curse at her if she disobeyed. The abuse got so bad that when Client was 13 years old, Child Protective Services was called by a neighbor. The neighbor noticed that Client had bruises above both of her eyes. Her bruises were the result of one of Client's mother's many physical attacks against her. Client was placed in the custody of her paternal grandparents by Child Protective Services. Client lived with her grandparents up until graduating from high school.

Client met her ex-partner at 18 years of age, soon after she graduated from high school. Their relationship has been off and on. During their relationship, Client began binge drinking. She started drinking socially and then began drinking every day. She said her drinking was to mask feeling "empty inside." Client's partner described being around her like "walking on eggshells." Their good times were great, but when they were in a rough spot in their relationship it would be tumultuous. Client was often passive aggressive and displayed resentment toward her partner. If Client's partner did what she wanted him to do, Client and her partner would get along "wonderfully." However, if

Client's partner would disagree with her about anything, she would often ostracize and criticize her partner. Client was the perpetrator of domestic violence during the relationship which was what ultimately led to him leaving her.

Client has a history of legal involvement. Client has been charged with domestic violence against her ex-partner twice within their seven-year relationship. Client has also been charged with misdemeanor assault twice after being involved in a bar fight within the past year.

In jail, Client is described as being difficult to be around. She often causes commotion if she does not believe she is receiving enough attention from the staff. At times, she will find what she can to cut herself to the point of bleeding in order for staff to attend to her.

Appendix F

Diagnostic Assessment Questionnaire

- 1. Which of the following would you use to describe the client? Choose as many that you believe apply.**

| | | |
|-----------|--------------------------|-----------------------|
| Anxious | Emotionally Dysregulated | Paranoid |
| Arrogant | Guarded | Perfectionist |
| Criminal | Impulsive | Physically Aggressive |
| Dangerous | Inflexible | Submissive |
| Eccentric | Interpersonally Unstable | Withdrawn |

- 2. How competent do you believe you are with assessing this client?**

- | | |
|---|--------------------------------------|
| 1 | Extremely Competent |
| 2 | Moderately Competent |
| 3 | Slightly Competent |
| 4 | Neither Competent nor Incompetent |
| 5 | Slightly Incompetent |
| 6 | Moderately Incompetent |
| 7 | Extremely Incompetent |

3. Why do you believe you have competence with assessing this client? Select all that apply.

Continuing Education Workshops

Consultation

Independent Study

Training

Clinical Experience

Coursework

4. Does this individual look more like a client with Antisocial Personality Disorder or Borderline Personality Disorder?

Antisocial Personality Disorder

Borderline Personality Disorder

5. How comfortable would you be with assessing a client in this setting?

- 1 Extremely Comfortable
- 2 Moderately Comfortable
- 3 Slightly Comfortable
- 4 Neither Comfortable nor
 Uncomfortable
- 5 Slightly Uncomfortable
- 6 Moderately Uncomfortable
- 7 Extremely Uncomfortable

6. Do you think the setting in which the client was being treated impacted your diagnosis?

Yes

No

7. If you saw these same traits in a client of the opposite gender of the one depicted, would this change your diagnosis?

Yes

No

Appendix G

Frequency of Respondents Use of Descriptive Words by Vignette Type

Table G1

Anxious

| <u>Vignette</u> | <u>Anxious</u> | | Total |
|---------------------|----------------|----|-------|
| | Yes | No | |
| Male Residential | 11 | 23 | 34 |
| Male Correctional | 11 | 14 | 25 |
| Female Residential | 11 | 10 | 21 |
| Female Correctional | 7 | 14 | 21 |
| Total | 40 | 61 | 101 |

Table G2

Arrogant

| <u>Vignette</u> | <u>Arrogant</u> | |
|---------------------|-----------------|-------|
| | No | Total |
| Male Residential | 34 | 34 |
| Male Correctional | 25 | 25 |
| Female Residential | 21 | 21 |
| Female Correctional | 21 | 21 |
| Total | 101 | 101 |

Table G3

Criminal

| <u>Vignette</u> | <u>Criminal</u> | | Total |
|---------------------|-----------------|----|-------|
| | Yes | No | |
| Male Residential | 2 | 32 | 34 |
| Male Correctional | 4 | 21 | 25 |
| Female Residential | 1 | 20 | 21 |
| Female Correctional | 4 | 17 | 21 |
| Total | 11 | 90 | 101 |

Table G4

Dangerous

| <u>Vignette</u> | <u>Dangerous</u> | | Total |
|---------------------|------------------|----|-------|
| | Yes | No | |
| Male Residential | 6 | 28 | 34 |
| Male Correctional | 4 | 21 | 25 |
| Female Residential | 2 | 19 | 21 |
| Female Correctional | 4 | 17 | 21 |
| Total | 16 | 85 | 101 |

Table G5

Eccentric

| <u>Vignette</u> | <u>Eccentric</u> | | Total |
|---------------------|------------------|-----|-------|
| | Yes | No | |
| Male Residential | 1 | 33 | 34 |
| Male Correctional | 0 | 25 | 25 |
| Female Residential | 0 | 21 | 21 |
| Female Correctional | 0 | 21 | 21 |
| Total | 1 | 100 | 101 |

Table G6

Emotionally Dysregulated

| <u>Vignette</u> | <u>Emotionally Dysregulated</u> | | Total |
|---------------------|---------------------------------|----|-------|
| | Yes | No | |
| Male Residential | 30 | 4 | 34 |
| Male Correctional | 23 | 2 | 25 |
| Female Residential | 20 | 1 | 21 |
| Female Correctional | 19 | 2 | 21 |
| Total | 92 | 9 | 101 |

Table G7

Guarded

| <u>Vignette</u> | <u>Guarded</u> | | Total |
|---------------------|----------------|----|-------|
| | Yes | No | |
| Male Residential | 4 | 30 | 34 |
| Male Correctional | 3 | 22 | 25 |
| Female Residential | 6 | 15 | 21 |
| Female Correctional | 3 | 18 | 21 |
| Total | 16 | 85 | 101 |

Table G8

Impulsive

| <u>Vignette</u> | <u>Impulsive</u> | | Total |
|---------------------|------------------|----|-------|
| | Yes | No | |
| Male Residential | 22 | 12 | 34 |
| Male Correctional | 14 | 11 | 25 |
| Female Residential | 15 | 6 | 21 |
| Female Correctional | 14 | 7 | 21 |
| Total | 65 | 36 | 101 |

Table G9

Inflexible

| <u>Vignette</u> | <u>Inflexible</u> | | Total |
|---------------------|-------------------|----|-------|
| | Yes | No | |
| Male Residential | 7 | 27 | 34 |
| Male Correctional | 3 | 22 | 25 |
| Female Residential | 5 | 16 | 21 |
| Female Correctional | 3 | 18 | 21 |
| Total | 18 | 83 | 101 |

Table G10

Interpersonally Unstable

| <u>Vignette</u> | <u>Interpersonally Unstable</u> | | Total |
|---------------------|---------------------------------|----|-------|
| | Yes | No | |
| Male Residential | 21 | 13 | 34 |
| Male Correctional | 20 | 5 | 25 |
| Female Residential | 15 | 6 | 21 |
| Female Correctional | 15 | 6 | 21 |
| Total | 71 | 30 | 101 |

Table G11

Paranoid

| <u>Vignette</u> | <u>Paranoid</u> | | Total |
|---------------------|-----------------|----|-------|
| | Yes | No | |
| Male Residential | 2 | 32 | 34 |
| Male Correctional | 1 | 24 | 25 |
| Female Residential | 0 | 21 | 21 |
| Female Correctional | 2 | 19 | 21 |
| Total | 5 | 96 | 101 |

Table G12

Perfectionist

| <u>Vignette</u> | <u>Perfectionist</u> | |
|---------------------|----------------------|-------|
| | No | Total |
| Male Residential | 34 | 34 |
| Male Correctional | 25 | 25 |
| Female Residential | 21 | 21 |
| Female Correctional | 21 | 21 |
| Total | 101 | 101 |

Table G13

Physically Aggressive

| <u>Vignette</u> | <u>Physically Aggressive</u> | | Total |
|---------------------|------------------------------|----|-------|
| | Yes | No | |
| Male Residential | 25 | 9 | 34 |
| Male Correctional | 18 | 7 | 25 |
| Female Residential | 12 | 9 | 21 |
| Female Correctional | 13 | 8 | 21 |
| Total | 68 | 33 | 101 |

Table G14

Submissive

| <u>Vignette</u> | <u>Submissive</u> | |
|---------------------|-------------------|-------|
| | No | Total |
| Male Residential | 34 | 34 |
| Male Correctional | 25 | 25 |
| Female Residential | 21 | 21 |
| Female Correctional | 21 | 21 |
| Total | 101 | 101 |

Table G15

Withdrawn

| <u>Vignette</u> | <u>Withdrawn</u> | | <u>Total</u> |
|---------------------|------------------|-----------|--------------|
| | <u>Yes</u> | <u>No</u> | |
| Male Residential | 4 | 30 | 34 |
| Male Correctional | 1 | 24 | 25 |
| Female Residential | 2 | 19 | 21 |
| Female Correctional | 0 | 21 | 21 |
| Total | 7 | 94 | 101 |

Table G16

None of the Above

| <u>Vignette</u> | <u>None of the Above</u> | |
|---------------------|--------------------------|------------|
| | No | Total |
| Male Residential | 34 | 34 |
| Male Correctional | 25 | 25 |
| Female Residential | 21 | 21 |
| Female Correctional | 21 | 21 |
| Total | 101 | 101 |

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