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Examining the Relationship Between Subclinical Borderline Personality Disorder and Social Support Networks

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EXAMINING THE RELATIONSHIP BETWEEN SUBCLINICAL BORDERLINE PERSONALITY DISORDER AND SOCIAL SUPPORT NETWORKS

By

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Abstract

The purpose of my study was to investigate the relationship between subclinical Borderline Personality Disorder and social support in situational measures such as social provisions, network size, and network satisfaction as well as dispositional measures such as support seeking and socially supportive behaviors. I hypothesized that BPD scores would be negatively correlated with all dispositional support measures. I also predicted that in situational support measures, BPD would have a negative correlation. I hypothesized when confronted with romantic stressors participants would receive more support when confounded with the workplace stressors. Participants (N= 178; 146 women 28 men, 3 nonbinary individuals, and 1 identified as other) attending Bucknell, a northeastern, rural, university completed the measures of all variables and subscales through an online self-report survey. Pearson's correlations between dispositional support and BPD scores revealed that BPD scores had a significant negative correlation with Nurturance and a significant positive correlation with Reassurance of Worth and Guidance. Pearson's correlations for BPD symptoms and social support for situational measures revealed that romantic stressors had a positive significant correlation to Nondirective Support. Between the workplace and romantic situation stressors, t-tests revealed that Nondirective Support was significantly higher in the romantic stressor than in the workplace while the workplace condition had significantly higher Reliable Alliance scores than romantic stressors. The results revealed that BPD symptoms had significant correlations to the type and amount of support provided situationally and dispositionally. Future research should focus on assessment measures with a multidimensional, spectrum approach, which would be useful for the subclinical population.

Examining the Relationship Between Subclinical Levels of Borderline Personality Disorder and Social Support

Borderline Personality Disorder (BPD) is a serious mental health issue that is defined by instability in affect, interpersonal relationships, self-image, and behavior (Gunderson et. al, 2018). Subclinical BPD does not meet the required number of symptoms to be diagnosed, but these individuals still experience the difficulties associated with BPD to an extent, primarily poor relationships and potentially low social support. Social support refers to the resources provided by the individuals one interacts with, particularly in times of stress (Beeney et al., 2018). This resource has, potentially, many mental health benefits, both direct and indirect. However, individuals with BPD perceive less social support than other individuals (Ingkachotivanich et al., 2022). Persons with BPD already experience more acute social isolation and loneliness (Liebke et. al, 2017), which increases stress and negative health outcomes. Decades of research show that social support is a necessary resource to deal with stressors and that lack of social support can be a stressor in itself. This project examined how levels of subclinical BPD relate to different components of social support. As a stable characteristic, social support includes satisfaction with support received and social network size. In relation to a specific stressor, support-seeking tendencies and supportive behaviors received were measured. These variables are each associated with more social support and well-being.

Borderline Personality Disorder (BPD)

Personality disorders are broadly defined as “an enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual’s culture” in the 5th version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; APA, 2003).

These violations of cultural expectations cause discomfort for the individual, those around them, or both. It has been estimated that almost 10% of the population has some sort of personality disorder (Samuels, 2011). Symptoms are longstanding and pervasive and can be traced back to early adolescence. Personality disorders are associated with high comorbidities in both mental and physical health diagnoses (Dixon-Gordon et. al, 2015). BPD is the most commonly diagnosed personality disorder, with a lifetime prevalence of 5.9% (Grant et al., 2008). However, personality disorders tend to have overlapping symptoms, making them often difficult to place people into a specific category. BPD symptom manifestation tends to overlap notably with Antisocial Personality Disorder (APD) and, as symptom severity increases, BPD profiles start to look more similar to Schizotypal Personality Disorder. Although all of these disorders can overlap in symptoms, they have different treatment paths and expected outcomes.

Life with BPD can be difficult to manage and is marked by self-injury and suicidal ideation. It has been found that rates of suicide are significantly higher in those diagnosed with BPD than in the general public (Pompii et al., 2005). BPD is most prevalent in populations with low income and education levels as well as Native American men (Grant et al., 2008). BPD is uniquely associated with high rates of sleep disturbances (Selby, Robiero, & Joiner, 2013). It is also common for individuals diagnosed with BPD to have anxiety or impulsivity disorders (Gunderson et. al, 2018). Because people with BPD experience emotional and psychological distress those with more severe cases of BPD may be more inclined to seek out treatment, leaving less information about more mild or subclinical presentations (Trull, 1995). Individuals with higher levels of BPD symptoms will be more distressed by them and seek out therapy. Unfortunately, the symptoms of BPD often impede the therapy process, suggesting there may also be less data on those who seek out therapy of their own volition because they are more

likely to terminate therapy early. The majority of the body of research has focused on individuals with diagnosed BPD in in-patient and outpatient programs (Grant et al., 2008).

Symptoms

Individuals with BPD experience a range of symptoms stemming from a fractured self and emotional instability. This commonly leads to volatile interpersonal relationships as well as putting these individuals at a higher risk for suicide. Individuals with BPD go to great lengths to avoid abandonment and can exhibit clingy or demanding behaviors (Gunderson et. al, 2018). Individuals have heightened sensitivity to perceived conflict in relationships and social issues (Gunderson et. al, 2018). They can alternate between intense dependency and focus on an individual to more manipulative communications when they feel devalued (Gunderson et. al, 2018). This instability makes it difficult to maintain relationships long term. Individuals with BPD. However, there are other components at play to make this disorder complex to treat and difficult to live with.

People with BPD grapple with internal conflict due to a poorly developed and unstable sense of self. Without a concrete identity, these individuals at times have difficulties understanding their own preferences and values. This has been described as an emptiness associated with higher levels of suicidality (Ellison et al, 2016). In turn, people with BPD may derive more happiness and self-esteem from a partner's words than they do from themselves. Individuals also frequently report low self-esteem, high self-criticism, and self-contempt (Gunderson et. al, 2018). This suggests that a lack of a stable internal environment is harmful to self-image and causes negative thoughts.

Emotional dysregulation, along with an intensely negative self-view, contributes to feelings of anger, instability, and emptiness. The impairment of regulation leads to strong

emotional reactivity, especially in interpersonal relationship conflicts. People with BPD tested for reactivity and suppression scored high on both scales (Trull, 1995). This suggests that they may use conscious effort to avoid thinking negative thoughts and emotions, which can be cognitively depleting and have the opposite of its intended effect. As a result, when individuals feel overwhelmed they are no longer able to suppress their feelings and respond with more intense emotion than expected. Higher BPD scores are associated with a higher prevalence of arguing with individuals in one's social networks (Beeney et al, 2018), likely due to the failed suppression and subsequent outbursts individuals with BPD experience. Heightened anger is common within this population and reflects lower levels of social functioning (Ellison et al., 2016). As I will discuss, persons with BPD often also struggle with depression and anxiety, further increasing social difficulties.

Emotional regulation is not the only issue making it difficult for these individuals to establish social relationships. People with BPD also struggle to regulate their behavior as they are driven by their emotionality. Without the ability to regulate emotions and behaviors, there is a marked increase in impulsivity. Acting without forethought is potentially dangerous and in the context of such negative and unstable emotions, puts these individuals at a disproportionate risk for self-harm and suicidal behaviors. Impulsivity is of special interest to treat because it is a large factor in suicide attempts. Training in mindfulness helps to lower impulsivity by helping to recognize impulses as an option, not the only choice (Wupperman et al., 2009). Impulsivity can lead to negative outcomes for the self and others.

BPD is marred with interpersonal dysfunction. Individuals with BPD tend to go between idealizing and devaluing those they are with, creating relationships that are high-intensity, unstable, and characterized by numerous fights (Lazarus et al., 2020). Interpersonal volatility is

influenced by an unstable sense of self which manifests as anxiety and self-hatred. People with BPD also tend to have fears of abandonment and do not handle separation well. Break-ups can worsen self-image issues by removing stability and a source of support. Conflict resolution can be difficult because negative emotional reactions to problems hinder communication. Women with BPD have been reported to perceive more unresolved conflict and consider separation from romantic partners more frequently than their partners (Lazarus et al., 2020). Strong relationships, however, can be helpful for those with BPD as it provides security and support to work through thoughts and emotions. Relationship stressors may require more social support for individuals who have BPD because they are perceived as more stressful than other types of negative events. Relationship stressors may also remove a source of social support that individuals are heavily reliant on, further heightening the need for resources from other individuals.

It has been theorized that BPD stems from childhood maltreatment, as poor-quality upbringing can impact development and encourage lifelong negative behavioral patterns (Gunderson et. al, 2018). Shields and Cicchetti found in their 1974 study that maltreated children exhibited deficiencies in affect and behavior regulation. These same deficiencies are foundational in BPD which suggests some BPD symptoms could stem from abuse. Among those with difficulties in emotional regulation, “inflexible and situationally inappropriate affective” actions were characteristic (Shields & Cicchetti, 1994, p. 72). Actions deemed inappropriate by peers can lead to rejection and loneliness in the early years. Development in formative years impacts the ability to create relationships among peers as a child and potentially throughout adult life (Shields & Cicchetti, 1994). The ability to self-regulate, particularly composure in negative situations, impacts others' perception and, therefore, reputation. The ability to create meaningful

peer relationships can be impaired. A lack of connection and community resources can be very isolating and worsen mental health.

Individuals with higher BPD scores have been reported to have higher levels of depression and negative affect scores (Trull, 1995) and, more recently, individuals who scored highest in BPD symptomology also scored highest in depression symptoms and suicidal ideations (Chabrol et al., 2020). In individuals diagnosed with BPD, interpersonal conflict is most strongly correlated to depressive symptoms (Cheavens, Strunk, & Chriki, 2012). Because these individuals struggle to resolve conflict on their own, social support is a practical resource to work through stressors and combat depression.

Comorbidities

BPD is commonly associated with some other mental health issues. Before the personality disorders were reclassified in the DSM-3 (APA, 1980), Borderline and Schizotypal personality disorders (SPD) were both considered "borderline states" as these individuals were seen as being on the border of neurosis and psychosis (Chabrol et. al, 2020). Although considered independent today, they do often occur comorbidly and share some overlapping symptoms. Both are marked by relationship difficulties, but SPD is characterized by more eccentricity (Chabrol et. al, 2020). However, when more severe BPD is developed, it looks more similar to SPD and has more symptom overlap (Chabrol et. al, 2020).

Post-traumatic stress disorder (PTSD) also has symptoms that overlap with BPD, and it can be difficult to discriminate between the two. Symptoms of PTSD, such as anxiety and sleep disturbances, are also considered symptoms of BPD. Both disorders can also be brought on by extreme stress and trauma, but impact the sexes at different rates (Chabrol et al., 2020), further hazing the boundary between the two. Trauma should be addressed as part of treatment to help

individuals with BPD. BPD is frequently connected to long term, complex trauma starting in developmental stages (Cheavens, et al., 2020), while PTSD is characteristically tied to specific traumatic events that happened to the individual or the individual watched happen to someone close to them (Leichsenring et al., 2011).

One interesting finding is that when PTSD and BPD are looked at as comorbidities, they are linked to impaired recognition of others' thoughts and intentions (Preissler et al., 2010). Some of the isolation and social struggles may come from not being able to accurately read and respond to the information being communicated through facial expressions.

Individuals with BPD are more likely to suffer from sleep disturbances and nightmares (Selby, et al., 2013). While it is not known exactly why individuals with BPD seem to suffer from sleep issues so much more frequently than others, it is theorized that emotional pressure and strong reactivity can cause emotional cascades (Selby et al., 2013). When emotionality is high, individuals with BPD struggle to return to baseline and intensely focus on their negative thoughts and feelings. This rumination and cycle of escalating negative emotions may increase cognitive activity while sleeping, leading to nightmares (Selby et al., 2013). Sleep disturbances are exhausting and further deplete the ability to manage emotions, creating a negative cycle. Comorbidities add to symptoms individuals deal with making it more difficult to handle and control their mental health.

As has been discussed, most individuals with BPD have comorbidities to some extent, and interestingly these can vary in prevalence by gender. Women are more likely to have a broad range of anxiety disorders, such as panic attacks and agoraphobia. Moreover, sleep disorders, body dysmorphia, and eating disorders were also more likely to develop in women than men (Chien et al., 2011). Leichsenring and colleagues (2011) further substantiated that women with

BPD are more likely to develop eating disorders than men. In many ways, these disparities are unsurprising given women are generally more likely to develop issues related to body image and anxiety than men, so it is expected to see a similar trend in the BPD population. Although a BPD diagnosis is less common in men, research shows that men with BPD are more likely to have negative symptoms such as social phobia and isolation (Chien et al., 2011). They were also more likely to be on the schizoid scale or have schizophrenic symptoms and to have higher rates of substance use (Chien et al., 2011, Leichsenring et al., 2011). Regardless of the societal and biological reasons why these gender differences arise, intervention plans that take comorbidities into account will be more client-tailored and effective. The gender differences observed are the product of a mix of genetic and societal differences. Women and men face different expectations and pressures from society, leading to different types of insecurities and coping strategies.

Emotions, thought patterns, and coping strategies are also inextricably related to personality traits and, by extension, personality disorders. Personality traits are thought of in five factors which indicate how healthily adjusted an individual is. The more commonly used trait perspective is the Five Factor Model (FFM) (Poropat, 2009), a model that has been integrated into the DSM 5. This model includes the traits Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Some personality disorders are defined by specific patterns of high and low combinations of traits. Individuals with BPD exhibited high levels of neuroticism and scored lower on adaptive traits like extraversion, agreeableness, and conscientiousness (Trull, 1995). Individuals who are more agreeable and extroverted have an easier time creating and maintaining relationships. Individuals with BPD tend to have more conflict in relationships, but being high in conscientiousness could help one learn to be concerned about and empathize with others more effectively reducing conflict.

Diagnosing BPD

BPD can only be diagnosed through structured and semistructured interviews. These interviews are time consuming and often individuals complete a much shorter preliminary screening measure to ensure they are likely to meet the diagnosis. According to the DSM 5, to be diagnosed with BPD, a client must meet at least 5 of 9 criteria. The criteria includes frantic efforts to avoid real or imagined abandonment, a pattern of unstable and intense interpersonal relationships that alternate from extremes of idealization and devaluation, identity disturbance in the form of notably and chronically unstable self-image or sense of self, impulsiveness in at least 2 damaging ways, such as binge eating or substance abuse is also required to be diagnosed. Suicidal or self-mutilating behaviors are related to impulsiveness but are considered to be their own separate criteria for BPD. Mood reactivity, usually only lasting a few hours, is a mark of an affective instability. The last three potential criteria are feelings of chronic emptiness, intense anger, and paranoid or dissociative state (Biskin & Paris, 2012).

Since it takes an in-depth interview to diagnose BPD, a screening measure is often implemented. Prior to a formal diagnosis, clinicians often rely on screening measures, which can identify those individuals who are most likely to be diagnosed with the condition. Screening itself is not diagnostic, but is helpful to determine if an individual should undergo a longer diagnostic process. Screening tools are ideal for testing larger populations because they are time and cost-effective. One such screening method, developed by Zanarini and colleagues in 2003, has gained particular popularity in the field. The McLean Screening Instrument for BPD (MSI-BPD; Zanarini et al., 2010) has been viable in college populations due to its short length and ease of distribution. This measure has been proven to have internal reliability in use with college populations with a Cronbach's alpha of .80 (Cano, Sumlin, & Sharp, 2022). This study

also found the average college student scored a 3.84 of the MSI-BPD with the cutoff being 7 for diagnostic intervention, suggesting it was able to capture symptoms below the clinical level. The Personality Assessment Inventory (PAI-BOR; Morey, 1991) is also a commonly used screening tool with a section relating specifically to BPD. The Personality Inventory for DSM-5 brief form (PID-5-BF) is another newer screening tool that emphasizes the multidimensional approach to BPD which will become an increasingly emphasized approach to BPD in the coming years.

There is a movement to reconceptualize BPD traits as a spectrum based on symptom types and severity. This aims to improve a holistic conceptualization of BPD, rather than focusing on broad categorical themes as the DSM does currently. Currently, the DSM-5 looks at BPD in a potential range of symptoms individuals could be classified as having or not having. If symptoms occur less frequently, even at intense levels, they could be overlooked. Similarly, symptoms that happen frequently but at very low levels could also be overlooked. Using a spectrum approach, symptom frequency and severity are taken into account. BPD is on a spectrum and there is an inherent tension in trying to categorize the disorder into neat boxes. BPD symptoms stem from personality traits, which exist on a continuum and can vary in intensity. For example, stability is a spectrum, and individuals with more traits consistent with BPD would be expected to have more unstable personalities, but levels would range from mild to severe in the general population. Symptoms also tend to vary in intensity, which the current model does not take into account. Diagnostic criteria traits are considered to be part of BPD when they are extreme and constant, but in the general population, individuals will vary from mild to severe versions of these traits. So, even if some symptoms are not severe and do not affect day-to-day life, they may be interacting or influencing the manifestation of other symptoms. There are individuals in the population who would not meet the diagnostic criteria for

BPD but could still benefit from the treatments and interventions available to treat some symptoms. It is notable to remember that personality disorders tend to have some overlapping symptoms. If an individual is diagnosed with BPD, for example, but they are also dealing with a lack of remorse, a common symptom of Antisocial Personality Disorder, these behaviors may not be addressed because they do not fit into the diagnostic label of BPD. Treatment of less severe symptoms, particularly in the college population, may have the potential to prevent symptoms from worsening and correct maladaptive behaviors early on.

BPD in College Students

College populations have seen a rise in clinical BPD prevalence, but it is uncertain if the disorder has become more common or if the methodology and classification have evolved (Meaney, Hasking, and Rupert, 2016). Prevalence rates for BPD are highest in young adults and appear less frequently after the age of 35 (Trull, 1995). This suggests that BPD symptoms would be most severe in college-age individuals. Prevalence in college is not well documented today in part because of methodological constraints (Meaney et al., 2016). Most of the measures are self-reported, and the type of self-report assessment varies greatly. Some measures are as short as ten questions or as simple as “yes” or “no” answers, while some take time and require written responses. Yet even in more elaborate written response measures, biases can not be ruled out. It is possible that respondents are responding as they think is socially acceptable or as they believe the researcher would like them to respond. Meta-analysis has shown that between .5% to 32.1% (a large range) of college students meet the criteria for BPD (Meaney et al., 2016). A more recent, smaller study estimated that 21.4% of college students screen positive for BPD (Cano et al., 2022). While there are not data on the prevalence of BPD in the general population between the ages of 18-22, a national epidemiological study found the lifetime prevalence of BPD among

those age 18-29 is 9.3% (Hasin & Grant, 2015) This relatively large percentage is in part because the severity of the condition often peaks around college age and symptoms tend to decrease from that point (Gunderson et al., 2011).

Impact on Students

Individuals with BPD are prone to cognitive and psychosocial deficits which are necessary components of a meaningful college experience (Meaney et al, 2016). These individuals must overcome diminished social skills that can indirectly negatively impact academic performance. Affective instability and persistent negative emotions and dissociation are a cognitive load and can prevent full attention from being dedicated to academics. Geiger and colleagues (2014) suggested that due to the high cognitive load weakens the ability to suppress negative thoughts. These negative thoughts are distracting, distressing, and further add to the cognitive load in a cycle that would negatively impact college students' ability to focus and succeed. Impulsivity, another hallmark of the disorder, can increase reckless behaviors such as substance abuse and excessive drinking, or simply skipping classes. It is not surprising to find that BPD has also been associated with college attrition (Meaney et al., 2016) considering the extra compiled stressors these individuals face. There is a lack of research regarding BPD on college campuses, but there are many surveys that record symptoms related to BPD. In one such major survey, 30% of students reported difficult intimate relationships, and 6.3% reported engaging in self-harm, both of which are common symptoms of BPD (Gallagher, 2014).

BPD as a Spectrum

There is a lack of data on diagnosed BPD in college students but there are many studies on symptoms relevant to BPD. There is evidence that some BPD symptoms are more prevalent than others in college students. Given this information, it is pertinent to study subclinical levels

of BPD. Individuals with subclinical BPD do not have enough or severe enough symptoms to be diagnosed but still have some symptoms consistent with the disorder (Preissler, 2010). While there is a specific number of symptoms needed to be officially diagnosed, BPD, like all personality disorders, exists on a spectrum. Subclinical levels of this disorder may not be as severe but may still have the potential to impact students' college experiences. Examining the experiences of a subclinical population provides insight into how having BPD traits impacts relationships and social interactions.

Examining subclinical levels is a promising place to start data collection considering a much larger subset of the college population will show symptoms of BPD without being formally diagnosed than would be represented in a clinically diagnosed population of college students. It is possible to look at a spectrum of symptoms and severities within an undergraduate population. By doing so, I was able to relate BPD traits to the differences in social network composition and perceived social support.

Individuals with BPD are more sensitive to perceived social rejection and isolation and report higher levels of loneliness than those without BPD (Liebke et. al, 2017). Critically, an individual who perceives themself to be more rejected, lonely, or generally unsupported may not actually report statistically lower levels of socialization or support than those who perceive themselves to be more supported. Adequate social skills are needed to maintain close relationships and stave off loneliness. Individuals with BPD, due to their emotional instability and volatile interpersonal relationships, may be perceived as more difficult to be around and have a lack of social resources. Because of the volatile nature of relationships with individuals with BPD, characterized by frequent fighting, the network itself may be a source of stress. There is also evidence that those with BPD have poorer quality networks due to the relatively high rate of

former romantic partners in the network compared to TD individuals (Liebke et. al, 2017). These unsuccessful or otherwise unhealthy connections are less likely to provide adequate support.

Some of the symptoms of BPD affect social support, which is very important when going off to college. Because severe BPD symptoms are associated with higher rates of attrition, studying more moderate and low levels of symptoms is a better option as these students cope comparatively better with the stresses of college. Bucknell is an academically rigorous university with a prominent Greek life culture, which can cause pressure to succeed in both domains. Since, as discussed previously, social stresses lead to academic disadvantage, it is less likely to see students in college with severe BPD symptoms than it would be in a less stressful environment. However, many individuals could still potentially be struggling with some symptoms of BPD. By viewing BPD as a spectrum disorder rather than a cut off, more individuals who are interested in better handling symptoms will be reached. In the college populations, management of symptoms, even when they are present in low amounts, could improve social relationships and academic success.

Social Networks

A social network can be generally defined as "relationships and interactions a person has with peers, friends, and family and their interconnections" (Redhead & Power, 2022). Social networks help to maintain well-being and are a critical coping mechanism in times of crisis. Social support is the provision of instrumental, informational, and emotional aid from others in order to cope with stress (Beeney et al., 2018). Tangible support can directly reduce stress by providing resources needed to remove a stressor, such as financial support. Social networks could improve health by providing a buffer to stress. A buffer in this context refers to a resource that does not prevent stress but helps to reduce it. Emotional support can act as a buffer by

creating a space in which the individual feels confident their needs can be met and they are valued, which generally increases self esteem (Priessler et al., 2010). Changes from a negative perception of a stressful event, which is encouraged by healthy social support, can reduce the amount of stress and anxiety felt. Emotional regulation is also helpful in reducing stress and is provided through the supporting and comforting behaviors of others. The type of social support may vary depending on what is situationally appropriate. The support that is appropriate for a deepl interpersonal stressors is likely different from the support that is needed to handle other types of stressors, such as workplace deadlines. I am interested in the difference in support types provided in interpersonal and intrapersonal stressors.

Networks are individual and vary in size, diversity, and interconnectedness. Different people can provide different types of social support, workplace peers may provide tangible assistance, while romantic partners may provide nondirective support. People with BPD have a larger number of previous romantic partners in their network than those with normal functioning (Hill et al., 2008). Maintaining unsuccessful relationships may be influenced by fear of abandonment. Social networks provide a source of resources that improve life in a multifaceted way. Having close healthy relationships help to maintain positive self esteem and prevent isolation. In the case of a stressful or traumatic event, a strong social network is able to provide more Tangible support such as financial help, helping with responsibilities, and even providing a space to talk about their emotions. Access to these all-important resources has very real implications, as studies have found smaller social networks are associated with increased mortality (Shumaker & Hill, 1991).

Because individuals with BPD are perceived as hard to deal with they may have less success maintaining interpersonal relationships and thus have smaller networks. Individuals with

smaller networks may feel they can not get the support and resources they need. The network may also be a source of stress itself, especially if in attempting to maintain relationships there is interpersonal conflict and negativity.

Network size

Network size can vary from person to person, with larger networks correlated to better social functioning (Liebke et. al, 2017). Socially active individuals will have more diversity in their network, as they are connected to people from different environments (Liebke et. al, 2017). The smaller a network is, the more likely an individual is to perceive themselves as isolated and experience loneliness (Liebke et. al, 2017). Loneliness is bad for health and has been shown to increase morbidity and mortality. Patients with BPD reported having similar network sizes to controls but still reported more perceived isolation and loneliness (Liebke et. al, 2017). This suggests that there are deficits in interpersonal skills or perception, not a lack of relationships. Networks can be sources of social resources, with individuals in healthy networks deriving satisfaction and social support. Women diagnosed with BPD, however, report less satisfaction and support from their social networks and more conflict and criticism (Lazarus et al., 2020).

Perceived Social Support

Social support can be given in the form of emotional comfort, assistance, or resources (Kagamimori, 2004). In college environments, social support is important for not only social stressors but academic stressors as well. Social support is a resource to reduce stress levels and work through events. This can reduce the negative impact of stressful events (Kagamimori, 2004). Proper social support also functions to prevent isolation, which can negatively impact mental health.

Present Investigation

The current study was designed to investigate the relationship between BPD symptoms and both situational and dispositional social support. I am interested in looking at the inclination to seek social support, perceived social support, network size, and socially supportive behaviors received. These variables were measured through self-report questionnaires.

Hypotheses

This study had 3 separate but related hypotheses. I measured the general perception of social support and support-seeking tendencies in relation to BPD. I measured the variables support seeking and socially supportive behaviors in relation to a stressful event by measuring specific behaviors and resources provided by agents. Situational stress was measured because it offers insights into how individuals perceive and react to stressful situations. Situational stress was broken up into two conditions; "workplace" and "romantic" stressors. I examined both conditions to see if there were differences in the type of support provided depending on the stressor type as well as if the support was related to BPD symptoms. This is because individuals with BPD tend to have volatile relationships with those they are close to, such as romantic partners. However, less research has been done on how individuals with BPD handle professional conflicts and if this type of stressor is perceived by individuals differently.

Hypothesis 1: Perceived social support would be negatively correlated to BPD scores.

Hypothesis 2: I also predict socially supportive behaviors and support-seeking tendencies reported in relation to a specific life stressor will be negatively correlated to BPD scores.

Hypothesis 3: Socially supportive behaviors and support-seeking tendencies will vary depending on whether the life stressor is considered "romantic" or "workplace". Due to the collaborative nature of the workplace, I expected this stressor to be more highly associated with higher levels

of Tangible Assistance. Due to the intimate and emotional nature of romantic stressors, I expected this condition to be more highly associated with non directive support measures.

Method

Participants

Participants consisted of 178 undergraduate students from different class years at Bucknell University. Bucknell is a primarily white private university in Pennsylvania. Bucknell draws students from across the country but predominantly comprises students from New York, New Jersey, and Pennsylvania. The sample originally consisted of 210 participants, which was reduced to 178 by removing individuals who had not completed the BPD symptom questions. Because individuals would be compared based on their BPD scores, individuals who did not answer all ten of the BPD surveys were excluded, leaving me with 178 participants. The sample consisted of 146 women (28 men, 3 nonbinary individuals, and one other). The sample composition was 83.7% white, 3.4% Black, 5.1% Asian, 3.9% Hispanic or Latino, and 3.9% identified as another race. The sample comprised of undergraduates, 46.0% of whom were age 18, 36.8% were 19, 13.8% were 20, 2.2% were 21, and .6% were 22. I aimed to have a sample size of 100 participants in our study and well exceeded that goal.

Participants were recruited through multiple methods. My primary method was to draw first-year students from the PSYC 100 subject pool in the fall and spring semesters. In exchange for participation, these students were granted course credit. I also contacted other students on campus including psychology majors, an affinity group, and members of Greek organizations. Additionally, I used a snowball technique in which several participants I reached out to also sent the study to peers. As an incentive, all participants were able to be added to a prize lottery for one of 4 $25 Amazon gift cards.

Procedure

The study was submitted to and approved by the Bucknell Institutional Review Board. The survey was hosted through Qualtrics using anonymous links. For a participant to begin the survey, informed consent was obtained. Consenting participants subsequently completed several surveys to assess the main study variables. Constructs were measured in the following order for all participants: BPD scores, social provisions, perceived social support, event-specific stressor recall, support seeking, and received support. The first two support measures were designed to assess more stable aspects of support, generally perceived level of support, network size, and typically provided support. The final two measures were designed to assess situational aspects of support that would be relevant during a stressful life event; support-seeking behaviors and supportive behaviors received. In the event-specific recall, there were 2 versions of a short answer question that were randomly assigned to participants in the survey. The question asked participants to detail a work or romantic stressor, depending on which question they were assigned, and asked how they handled and attempted to resolve the issue. The short answer question was analyzed to see if the variable type of stressor was associated with the types of socially supportive behaviors provided to the participant. I also looked to see if the types of support-seeking behaviors were related to the type of stressor being experienced. In the initial portion of the survey participants recorded demographic information. The data set was downloaded from Qualtrics without any identifying information attached.

Measures

Demographic data were gathered at the beginning of the survey. This included race, gender, age, and sexual orientation.

Borderline Personality Disorder. McLean Screening Instrument for BPD (MSI-BPD; Zanarini, Frankenburg, Hennen, & Silk, 2003): Participants completed the ten-item McLean Screening Instrument for BPD. This ten-question survey uses a Yes or No format designed to measure DSM criteria of BPD in a self-report style. The MSI-BPD is a reliable measure with a Cronbach's alpha of .77 (Melartin et al., 2009). In the present study, the data set produced an alpha of .79, consistent with previous measures.

Social Support Satisfaction. Participants complete the Social Provisions Scale (SPS: Cutrona & Russell, 1987) to examine six types of social support; Attachment, Social Integration, Reassurance of Worth, Reliable Alliance, Guidance, and Opportunities for Nurturance. Attachment, an emotional closeness with another that provides a sense of comfort, historically has a reliable alpha of .75 (Cutrona & Russel, 1987). Social Integration, the feeling of being a valued member of a community, has an internal validity of .67. Reassurance of Worth, the feeling of being valued by others, has a past reliability of .67 as well. Reliable Alliance, understanding you can count on another to help you, has a historical reliability of .65. Guidance, receiving advice and direction, has been shown to have a strong alpha of .76. Opportunities for Nurturance, the ability to provide care for others, has a previous reliability of .66. The SPS consists of 24 questions that are scored on a 4-point Likert scale ranging from strongly disagree to strongly agree. (e.g., "I feel part of a group of people who share my attitudes and beliefs"). The SPS has been used extensively and demonstrated to have a high reliability and validity (Cutrona & Russell, 1987). The SPS has a moderate to strong Cronbach's alpha of .86. Our survey had a similar alpha of .90, with the subscales also producing alphas demonstrating strong reliability (see Table 1).

Social Support. Participants completed the Social Support Questionnaire (SSQ: Sarason, Levine, Baham, & Sarason, 1983) to help me gain insight into the individuals within the participant's network who provide support and their satisfaction level with the support received. There are 6 questions each containing two parts. In the first part, participants are asked to list up to nine people they can count on for help and support (e.g., "whom can you really count on to be dependable when you need help?"). In the second part, participants are asked to rate how satisfied they are with their support on a 6-point Likert scale ranging from very satisfied to very dissatisfied. The alpha for the original questionnaire was .97 (Sarason et al., 1983). The alpha for our satisfaction total was also high at .94

Seeking Support. Support seeking in relation to a specific stressor was assessed with items drawn from two popular coping surveys. Specifically, I used items from the COPE Inventory (Carver, 1989) such as "I asked people with similar experiences what they did" and the Coping Strategy Indicator (Amirkhan, 1990) such as "sought reassurance from those who know you best". All 19 items were on a 4-point Likert scale from "I do not do this" to "I do this a lot". Our study is the preliminary research using this measure and produces a near-perfect alpha of 1.0. Because this combination of items was not used before I took steps to examine if the measure formed one overall scale or multiple subscales. Using varimax rotation, I analyzed the data for factor occurrence. All items loaded most strongly on the first, unrotated factor which accounted for 64% of the variance in the data. Although there was some evidence of two different factors, factor 1 being emotion-based and factor 2 being problem-focused, the number of split loadings was comparatively high on factor 2. Split loading suggests that a question is associated with both factors. Since questions loaded on factor 1 at much higher levels, I concluded that the score on factor 1 was most appropriate for all 19 items.

Supportive Behavior. The Inventory of Socially Supportive Behaviors (ISSB) provides insight into specific supportive behaviors a participant has been the beneficiary of in the stressful situation they wrote about (e.g; “Did some activity with you to get your mind off of things") (ISSB; Barerra, Sandler, and Ramsay, 1981). The questions are assessed on a 5-point Likert scale from “Not at all” to “Several times a week”. The questions have previously been demonstrated to have 3 main factors of Non Directive Support, Tangible Assistance, and Guidance and Feedback. Nondirective Support, which provides a secure environment to explore emotions, has previously demonstrated a strong alpha of .93. Tangible Assistance, providing physical resources, has an alpha of .90. Guidance and Feedback, defined as giving advice, have a high reliability of .80 as well (Walkey, et al., 1987). The inventory has been demonstrated to have a high alpha of .912 (Barerra et al., 1981). Our survey results had an alpha of .96, with the subscales of supportive behaviors also having high subscales, suggesting that these factors are reliable (Table 1).

Results

Overview

The first step in data analysis was to examine the descriptive statistics and test the assumptions necessary for subsequent tests. This data is included in Table 1. All statistical analyses were conducted through the SPSS program. Descriptive statistics including alphas were run for all scale and subscale data. Because BPD scores were highly negatively skewed analyses were repeated with BPD being treated as a dichotomous variable divided into individuals who had low symptoms (between 0-4) and those who had at high symptoms (5-10). Nonparametric tests were run to test the assumption of normality. T-tests were run to see if gender differences existed within the data sample. All effect sizes were calculated according to Cohens d. To test the

study hypotheses a mix of t-tests and correlations were run. Specifically, Pearson correlations were performed to investigate the first two hypotheses; that both situational and dispositional measures of social support would be negatively correlated to BPD scores. T-tests were used to determine whether support seeking and received support differed based on the type of stressful event recalled. Correlations were again used to explore the possibility that BPD-support correlations depended on event type. Missing data were accrued throughout the data set, resulting in some missing subscale scores. I relied on pairwise deletion, using all available data for each analysis. For this reason, N's varied from analysis to analysis.

Preliminary analysis

First, to examine whether the data were normally distributed a series of K-S tests were run on all 17 variables (Table 2), with 11 violating the assumption of normality ($p < .05$). Visual inspection of the distributions showed that although variables departed from normality, did not appear to grossly deviate from expected patterns. However, the BPD results showed a skewed distribution, which is to be expected in a population of subclinical individuals (Figure 1). A large number of subjects indicated no symptoms, suggesting the test was not nuanced enough to capture subtle variations among participants with low symptomatology. Upon closer examination, I found that the questions that had the highest positive response rates were focused on impulsivity, mood regulation, and distrust of others. The question "have you been extremely moody" had the highest positive response rate with 40.1%, while "have you deliberately hurt yourself physically or made a suicide attempt" had the lowest positive response rate with only 15.8%. The distribution of 'yes' and 'no' responses for each question are detailed in Table 3.

Due to the fact that BPD is historically more prevalent in women than in men (Meaney et al., 2016) and women tend to have more robust social networks from which they report getting

more social support than men (Day & Livingstone, 2003), a series of t-tests were performed. These tests revealed women exhibited more symptoms (M=3.15, SD= 2.66) than men (M= 2.17, SD= 2.17) at a significant level $t(169)= 1.66$, $p< .05$ with a large effect size of -.43 using Cohen's d (Table 4).

Hypothesis 1: *Generally applicable perceived social support and support-seeking measures would be negatively correlated to BPD scores. Those with lower BPD scores should have larger social support networks.*

Some of the measures negatively correlated to BPD scores while others had a positive correlation. Nurturance was the only measure to have a significant negative correlation to BPD scores, $r(172)= -.24$, $p<.01$ significant at the .01 level. BPD scores positively and significantly correlated to Reassurance of Worth, $r(171)= .23$, $p<.01$ and Guidance, $r(171)= .15$, $p<.05$. BPD scores also had a small positive correlation to Social Integration and Attachment, but these were not significant findings. A slight negative correlation was found between Support Network Satisfaction Total and BPD scores.

BPD scores did not produce a strong correlation to network size. Moreover, BPD scores were not strongly correlated to network satisfaction. However, network satisfaction was, as expected, significantly positively correlated to network size overall.

Hypothesis 2: *Socially supportive behaviors and support-seeking tendencies reported in relation to a specific life stressor will be negatively correlated to BPD scores.*

Pearson correlations were conducted to analyze results based on stressor type. When looking at both workplace and romantic stressors in relation to BPD, there were no significant correlations. BPD scores were negatively correlated to Guidance and Tangible Assistance. BPD scores positively correlated to Nondirective Support and Seeking support scales.

Correlations between BPD symptoms and social support were similar for the two stressor types. These results can be found in Table 5. For the workplace stressor, no correlation was above .10 and none were statistically significant. Although the correlations were higher in the romantic stressor condition, only one of the five correlations was statistically significant. Specifically, in the romantic stressor condition Non Directive Support had a positive significant correlation with BPD scores $r(53)= .31$, $p<.021$. There was also a nonsignificant positive correlation to Seeking Support.

T-tests were conducted to analyze results based on the level of dispositional support received and the presence or absence of BPD characteristics. Similar to my previous analyses, there were no significant differences between the groups based on BPD presence.

Hypothesis 3*: Socially supportive behaviors and support-seeking tendencies will vary depending on whether the life stressor is considered "romantic" or "workplace"*

T-tests were performed to find any differences in socially supportive behaviors and support seeking tendencies with the two stressors (Table 6). The t-test revealed a significant difference in mean scores on Non Directive Support in the workplace stressor group ($M= 41.76$, $SD= 12.94$) and romantic stressor group ($M= 46.22$, $SD= 12.18$), $t(99)= -1.78$, $p< .39$. According to Cohen's d, these results had a moderate to large effect size of -.36. There was a significant difference in Reliable Alliance scores between the relationship group ($M= 5.75$, $SD= 1.63$) and the workplace group ($M= 6.38$, $SD= 2.16$), $t(90.79)=1.68$, $p <.048$, which had a smaller effect size of -.16.

Further analysis.

Pearson correlations were performed between the Seeking, ISSB, SPS, and SSQ scales and subscales to investigate any relationships between these measures. Without BPD as a factor,

the measures correlated highly to one another. As expected, for each measure the subscales were significantly correlated to the scale total (p<.01). Seeking support was significantly correlated to all scales and subscales (p< .01) except the SSQ. The seeking scale has a positive significant correlation with ISSB and subscales, but a significant negative correlation with SPS subscales. Tangible Assistance from the ISSB had the fewest correlations with SPS subscales but was still significantly correlated to the SPS Total at the .01 level. Besides this, the SPS and ISSB are significantly negatively correlated.

When BPD traits were recategorized as present or absent, 63.0% of men reported one or more BPD traits, while 78.6% of women had at least a score of 1, however, this was no longer significant in a chi-squared analysis. There was significant variability between men and women, likely exacerbated by the comparatively low number of men in the sample, and equal variances were not assumed. Women scored significantly higher on the overall ISSB (M= 111.97, SD= 29.58) than men (M= 91.88, SD= 23.79), t(149)= -3.25, p< .001, with a large effect size of -.70. Women scored significantly higher than men on all of the ISSB subscales. Nondirective Support varied between men (M=39.04, SD= 10.58) and women (M= 47.73, SD= 12.31), t(154)= -3.36, p< .001, with a large effect size of -.72. Guidance scores differed for men (M= 33.33, SD=10.17) and women (M=39.36, SD=12.31) t(154)= -2.37, p< .001, with a large effect of -.46. Tangible Assistance scores were also lower for men (M=19.96, SD=8.88) than women (M=25.41, SD= 8.88), t(159)= -2.95, p= .003, with a large effect size of -.58. Due to the small sample of nonbinary individuals (N=3), no specific analysis could be conducted. Measures of Attachment from the SPS were significantly higher for men (M= 8.44, SD=1.89) than women (M=9.18, SD= 1.80) t(171)= 2.63, p= .007, with a large effect size of .51. Network Satisfaction was

singificantly higher for women (*M*= 32.64, *SD*= 4.85) than men (*M*= 31.64, *SD*= 5.57), *t*(169)= -1.81, *p*< .05 and had a large effect size of -.41.

T-tests were performed to examine the differences in levels of dispositional support in individuals reporting low (0-4) or high (5-10) levels of BPD. Analysis revealed that Guidance was significantly higher in the high BPD group (*M*=6.53, *SD*= 2.14) than in the low symptom group (*M*=5.93, *SD*= 1.82), *t*(119)= -1.86, *p*< .03, with a moderate effect size of -.31. Reassurance of Worth was significantly higher in individuals who reported high BPD symptoms (*M*= 7.79, *SD*= 1.78) than those who reported low (*M*= 7.07, *SD*= 1.84) *t*(169)= -2.04, *p* <.002, with a moderate effect size of -.34. Attachment was significantly lower in the low BPD group (*M*=8.21, *SD*= 1.32) than the high BPD group (*M*= 8.63, *SD*= 1.34), *t*(119)= -1.91, *p*< .03, with a moderate effect size of -.32. Nurturance was significantly higher in individuals who reported low BPD symptoms (*M*= 8.82, *SD*= 1.78) than those who reported low (*M*= 8.12, *SD*= 2.20), *t*(170)= -2.18, *p* <.015, with a moderate effect size of .38. Social Integration, Reliable Alliance, and overall Support Satisfaction did not differ significantly between groups.

Discussion

The purpose of the study was to better understand, within the subclinical college population, the relationship between BPD symptoms and social support defined in a number of ways. Included in these conceptualizations of support were dispositional measures of Attachment, Social Integration, Reassurance of Worth, Reliable Alliance, Guidance, Opportunities for Nurturance, Network Size and Satisfaction, and situational measures of perceived support and support-seeking behaviors. Based on evidence that individuals with BPD struggle with interpersonal relationships (Stepp et al., 2009) and have constricted networks (Clifton et al., 2007), I expected those individuals who reported more BPD symptoms would

have less dispositional perceived social support in the form of smaller network size and lower support satisfaction. Because the prevalence of BPD has risen over the years (Meaney et al., 2016) and college students are disproportionately affected by symptoms (Grant et al., 2008), this work is increasingly relevant. The results of this study indicate that BPD scores do have a relationship with dispositional support measures, although the results were not completely as anticipated. Because there is literature citing intimate romantic relationships to be particularly volatile for individuals with BPD (Chabrol et al., 2020), I also investigated situational measures of social support in relation to romantic relationships and workplace relationships. I predicted socially supportive behaviors and support-seeking tendencies reported in relation to a specific life stressor would be negatively correlated to BPD scores. I also predicted that the romantic and workplace reports would differ in their levels of social support with romantic situations having higher levels of social support. The findings were not consistent with these expectations. There is evidence that individuals with BPD have higher rates of unemployment and disability (Hill et al., 2008), so socially supportive behaviors and support-seeking tendencies could be less common in the workplace.

The hypothesis that BPD scores and dispositional support will have a negative association was partially supported as individuals with higher BPD scores reported lower levels of Nurturance and higher levels of Reassurance of Worth and Guidance. The hypothesis that situational support would differ depending on the stressor type was also partially supported; the romantic stressor group reported higher levels of Nondirective Support regardless of BPD scores. Additionally, the workplace stressor group reported higher levels of Reliable Alliance. In the romantic stressor group, higher BPD scores were associated with higher levels of Nondirective Support.

The workplace can often be a collaborative, or at least social, environment that relies on working well with others. My results are consistent with the idea that workplace stressors may be met with higher levels of reliable alliance. A reliable alliance reassures the individual that the agent can be counted on for tangible forms of assistance (Cutrona & Russell, 1987). This may be more prevalent in the workplace due to the nature of the relationships. Reassurance of the ability to count on each other helps strengthen alliances and increase workplace sociability. Although we did not find correlations between BPD traits and workplace social support, it is reported that individuals with diagnosed BPD have higher rates of unemployment than typically developed individuals (Hill et al., 2008). This could be related to the social challenges these individuals face that may prevent them from being efficient at their job. My results had a small effect of -.16, which suggests a small difference in the amount of support actually received between the groups. Studies have shown that after a naturally occurring social interaction, BPD patients had significantly higher levels of hostile and dominant behaviors than controls, suggesting strong emotionality is affecting communication (Lis & Bohus, 2013). In college populations such as the one I studied, academic spaces are also commonly collaborative. Atypical communication could be perceived as inappropriate or unprofessional in a groupwork setting. Since I did not see social support correlate to the low levels of BPD in my subjects, it could be that such mild symptoms did not disrupt individuals ability to receive social support in the workplace.

Individuals with diagnosed BPD may also receive less workplace support because they are perceived as more aggressive. A study by New and colleagues (2009) illustrated that individuals with BPD showed more aggression without provocation than controls and, when provoked, showed a larger increase in aggressive behaviors which is consistent with Stepp and colleagues (2009) findings that BPD patients had more angry and disagreeable social

interactions. This could make individuals with BPD symptoms seem less approachable and during disagreements, their comparatively aggressive behaviors may seem unprompted. Depending on the symptoms present, these social stressors may make the workplace a particularly challenging environment for individuals with severe symptoms of BPD, especially affective instability. However, these issues do not appear to prevail in extremely mild presentations of BPD.

Romantic relationships create intimate, emotional bonds and when these connections are threatened it can be distressing for anyone, especially individuals with BPD symptoms. I found that Nondirective Support given due to a romantic stressor was correlated to the number of BPD traits present. Nondirective Support empowers and allows space for individuals to independently explore their thoughts, feelings, and emotions. This sort of support is common in counseling and helps an individual have more personal growth. My findings suggest that this type of support is widely used when individuals are dealing with negative personal conflicts outside of therapeutic interactions.In comparison between the stressors, the effect size was -.36, indicating a medium to large difference in the scores with individuals in the workplace condition reporting moderately more nondirective support. Since individuals with symptoms of BPD may be feeling negative emotions more often, they receive more Nondirective Support. This type of support has also been associated with “intimate interactions” (Stepp et al., 2009), suggesting that this type of support can also be provided by close friends. Individuals may be more likely to turn to their close friends to talk about relationship stressors than the workplace. Nondirective Support is also, at face value, one of the more helpful supports that can be offered during romantic turmoil. Since romantic relationships are to an extent private, offering a space to reflect on the situation at hand and sort one's own emotions can be clarifying and grounding. Individuals with BPD can struggle

to identify their emotions correctly, and rather identify a general state of inner tension (Wolff et al, 2007). My findings are consistent with the idea that providing Nondirective Support is more relevant for individuals with BPD symptoms, because it allows them time to try and correctly identify their negative inner emotions. While the idea that Non Directive support may affect individuals with BPD differently than controls needs more research, my study supports the idea that individuals with more BPD symptoms may have more difficulty identifying their emotions and need more Guidance than non-directive support to reduce negative affect.

Gender differences. Historically, BPD has been more prevalent in women than men. Men, alternatively, are more likely to be diagnosed with disorders such as antisocial and schizotypal personality disorders (Chien, 2011; Johnson, 2003; Silberschmidt, 2015). I was interested to see if men and women differed in their symptomology or social support. My study revealed that women had more symptoms of BPD than men. More women had at least 1 more trait of BPD than men. Women also reported receiving more Non Directive support, Guidance, and Tangible Assistance than men, along with having better network satisfaction. These findings are consistent with some, but not all, of the evidence; some studies have reported no difference in symptom number by gender in individuals with BPD (Johnson, 2008). A multinational study suggested that women have more symptomatology than men (Silberschmidt, et al., 2015). However, due to the low rates of men diagnosed with BPD, the variability in characteristics between genders has been largely unexplored. Although substantial differences in symptomology were not present in my study, preliminary research in adolescence with BPD suggested that males tend to have more outwardly aggressive behaviors such as bullying and sadistic tendencies which are more aligned with a psychopathic presentation, while females had tendencies towards hypersexuality and overattachment (Bradley, Zittel, & Westen, 2005). Since men tend to have more outwardly

aggressive symptoms, also consistent with APD, the question of how efficacious the categorization of personality disorders is arises.

Due to the potential differences in symptom profiles for men and women, it is possible that there would be differences in the quality, type, and number of relationships individuals are able to make. In my study, all significant measures of gender differences had large effect sizes, suggesting that there is a large experiential difference between the social support men and women receive. Women with BPD characteristics may have atypical social networks consisting of a large number of former romantic partners due to their tendencies towards traits that would disrupt relationships. Women with BPD have higher levels of fear of abandonment, difficulty controlling anger, and the tendency to express emotion (Bradley, Zittel, & Westen, 2005). These issues are triggered by relationship conflicts, but can also be the cause of tension and conflict. College age women, regardless of BPD symptoms, experience more mental distress than men and women with high levels of mental distress also reported lower social support (Folmo et al., 2021). Consistent with this, my study found that women receive higher levels of all types of directive support. Women may rely on their networks for more support because they more often perceive experiencing stress and negative emotions. Women also tend to have stronger, more frequently tended to relationships than men (Neff & Karney) that may lend themselves more naturally to supportive actions. Consistent with this, women, in my study, reported higher network satisfaction than men. The effect size suggests that there are noticeable differences between the two groups scores, and men may feel acutely less supported than women.

There is also evidence that men and women may rely on different aspects of their networks more. For example, mortality is higher for unmarried men than women but when looking at decreased contact with friends and relatives mortality is higher for women (Shumaker

& Hill, 1991). This suggests that men reap the benefits of having a partner that supports them emotionally, while females do not receive the same benefits and are taxed to an extent by the lack of perceived support. More recent studies have similarly found that a romantic relationship is associated with significantly higher life satisfaction and self-esteem in men than women, while women have significantly higher well-being than men when they report more social support (Stronge, Overall, & Sibley, 2019). This pattern suggests that men may be more reliant on the person they are closest to for the majority of their support, while women rely on a larger network of relationships. However, my study found that network satisfaction did not significantly differ between men and women, suggesting that even though they are relieving different levels of social support, both are satisfied with the level received. Wives are reported, both by themselves and spouses, to provide more support to their husbands than their husbands do for them (Neff & Karney, 2005), suggesting that women may be more adept at maintaining social relationships. Neff and Karney (2005) also found that while husbands and wives did not differ in their support abilities, men did not vary in the support they provided based on the severity of the issue, while women did. This suggests women are more perceptive of their partners' needs and tailor their support to be relevant to the situation, making it more effective. Individuals with BPD are more sensitive to perceived unfairness and, as a result, women with BPD may get into more interpersonal conflicts if they feel their support needs are not being met. Furthermore, women have reported utilizing their social networks for support more frequently than men do when stressed (Day & Livingstone, 2003). Women with with BPD may rely on their network for social support more often than women without BPD and consistent with this, at the subclinical level women with more BPD symptoms did recieve more social support. Although my study did not look at more severe symptom profiles, men with BPD will have more emotional distress than

controls and would benefit from network support but, because men rely less on their networks in general, may not receive it.

BPD and Dispositional Support. The number of BPD symptoms did not seem to relate to network size variables but, as expected, network size and satisfaction were highly correlated. Individuals with higher BPD scores did however report lower levels of Nurturance. Individuals who reported higher levels of BPD also reported higher levels of Reassurance of Worth and Guidance from their social networks.

Network size. Network size has been linked to social support in multiple studies (Neff & Karney, 2005; Shumaker & Hill, 1991). Self reported academic success in college students was reported to be related to the number of school related friendships acquired (Skahill, 2002). I expected individuals with more BPD symptoms to have smaller networks and lower levels of satisfaction. In previous studies, participants with BPD had significantly fewer individuals to interact with those with no PD, but overall daily social interactions were no different (Stepp et al., 2009). This suggests the quality of social networks is impacted more than the number of social interactions in persons with BPD. Smaller networks have been associated with more loneliness (Liebke, 2017). Consistent with this, my study found more social support correlated to higher network satisfaction. Loneliness is an outcome of a small social network and low social support but it is also a stressor in itself. In college populations such as the one I used, sociality is valued and loneliness is actively avioded when possible. Individuals with BPD are more likely to have smaller networks and experience loneliness. Individuals with BPD are emotionally volatile and dealing with extra stressors such as loneliness may further negatively impact their mental health. However, my study did not find that BPD scores to impact satisfaction, so they likely did not influence loneliness. Since this subject pool generally had high network satisfaction, it is

likely they are provided adequate support and maintain healthy enough relationships to avoid loneliness.

A network in which agents have more relationships within the network overall is seen as more interconnected. While I looked at network size and satisfaction, I did not investigate interconnectedness. Interconnectedness is another way to categorize the quality of social networks. A network in which most of the people know each other has the benefit of acting as a community. Further investigations could look at interconnectedness as it related to support and BPD scores. In most networks, the agents an individual is closest with tend to have the most connections. It is common to see inappropriate relationships in persons with BPD and would expect to see that reflected in the quality of their social networks.

Nurturance. Individuals with higher BPD scores reported lower levels of Nurturance. Individuals with high Nurturance scores will feel able to take care of individuals in their support network. Heightened negative emotions of BPD can make individuals feel more aggressive in social situations (Schmahl, 2014). It is possible that individuals with more symptoms of BPD are providing less Nurturance, while also being more sensitive to perceived deficits in their caretaking and are upset by the lack of emotional connections they provide. It is also possible that individuals with more symptoms are providing less nurturing actions due to their tendencies towards less stable relationships. Nurturance allows an individual to rely on others for their well-being (Cutrona & Russell, 1987). This type of intimacy can increase closeness and help to strengthen relationships (Schmahl, 2014). It makes sense that, according to my results, individuals who struggle to maintain healthy stable relationships perceive or experience less Nurturance in times of distress. Individuals with BPD also tend to judge the intentions of others more negatively (Langeland & Wahl, 2008; Stepp et al., 2009; Wolff et al., 2007) and may

struggle to be emotionally open enough with an individual to care and provide for others. More in depth measures would be required to decipher precisely why Nurturance differs with BPD symptoms. Nurturance is also associated with feeling confident that stimuli are predictable and able to be managed (Langeland & Wahl, 2008) Since Nurturance is characterized by support to others, if an individual is seen as unable or willing to reciprocate care it could disrupt the relationship. Taking steps to learn when and how to provide nurturing behaviors would not only strengthen relationships for individuals with BPD symptoms, but provide agency. Taking care of others may provide a sense of capability or agency that improves self esteem, which is often negatively impacted with BPD symptoms.

Reassurance of Worth. Individuals who reported higher levels of BPD also reported higher levels of Reassurance of Worth from their social networks. Reassurance of worth involves being recognized and acknowledged for one's abilities and value. (Cutrona & Russell, 1987). This type of support helps to improve self-efficacy and supports self-esteem (Cutrona & Russell, 1987; Gottlieb & Bergen, 2010). This support invokes a feeling that one has added value or contributed to society (Demark-Wahnefried et al., 2018). Due to my results, I believe this type of support can be provided by work relationships because it is a less intimate type of support than Nurturance and is, therefore, more easily provided by more agents. It is possible that individuals with more BPD symptoms get distressed more often and, in turn, their network provides more Reassurance, however, my results did not find a similar trend in this subclinical population. Since this is a subclinical population, even most individuals on the higher end of symptomatology did not have severity consistent diagnosable BPD. A possible reason my study sees higher levels of Reassurance without disrupted social networks is that even with low levels of symptoms, individuals are feelign more internal negativity than their peers and. Even though

these individuals are still experiencing symptoms to some degree, it is there is not evidence that it is disruptive to their social relationships, so they are able to receive higher levels of support in the form of Reassurance of Worth. Low levels of reassurance of worth could cause burnout due to a lack of feelings of accomplishment and heightened emotional stress (Maslach & Leiter, 2006), making it particularly valuable to the college population. Higher levels of reassurance of worth are associated with more agency and healthier life choices in older adults (Demark-Wahnefried et al., 2018) suggesting feeling valued is related to positive behavioral benefits. College students with low levels of BPD could turn to on campus clubs of interest to find a network that provides reassurance of worth to improve wellbeing.

Guidance. Individuals with more BPD symptomology also reported higher levels of Guidance. Guidance as a social support is particularly helpful when stressors arise because advice and information facilitate problem-solving. Guidance is most commonly provided by mentor figures such as teachers or parents (Gottlieb & Bergen, 2010). Guidance has been shown to be the strongest deterrent of depression after childbirth (Cutrona & Russell, 1987), suggesting that Guidance could be a useful protection against adverse mental health issues, especially during times of high stress and uncertainty. In my study, individuals were able to receive higher levels of support such as Guidance because their social networks were not disrupted. Since Guidance is typically provided by mentors, these agents may feel some responsibility for helping the individual through stressful situations. Because Guidance is a strong deterrent to mental stress, individuals with higher BPD scores may benefit from spending more time speaking with trusted advisors, such as counselors, when more severe stressors arise.

Situational Support in Different Stressor Types. As expected, there were differences in socially supportive and support-seeking behaviors between the two stressors. The romantic

stressor group reported higher levels of Nondirective Support regardless of BPD level. The workplace stressor group reported higher levels of Reliable Alliance. Reliable Alliance is common in the workplace as maintaining good relationships requires collaboration. Although I did not find this, the literature supports that more high quality social relationships is associated with more success (Skahill, 2002). Creating healthy relationships and ensuring one is well supported provides the resources one needs to be satisfied in different social domains. When reporting about romantic relationships, more Non Directive Support was also correlated to higher BPD scores. Nondirective Support allows an encouraging environment to explore emotions. Individuals with higher levels of BPD are more likely to have more intense and negative feelings regarding interpersonal conflict, and even more so because romantic conflicts are likely to trigger a fear of abandonment. In these scenarios individuals may require more Nondirective Support to understand and regulate their feelings. On a college campus, is beneficial to have healthy relationships that are able to provide effective support to reduce the harmful effects of stress whether BPD symptoms are high or not.

Social Support Correlations. The majority of participants scored between 0-2 on my BPD measure. This measure has previously demonstrated an average score of 3.84 in the college population (Cano, Sumlin, & Sharp, 2022), so the results did not align with my expectations. The BPD measure potentially was not sensitive enough to pick up smaller variations in BPD symptoms, which is necessary for seeing the relationship between social support and BPD in the subclinical population. It is also possible that BPD traits in this population are much lower than anticipated. Because of this, I looked at the scale correlation without BPD as a factor to see if our measures were consistent. The fact that all of our support scales were correlated suggests that having high support in one area will likely be associated with high support in other areas. This

makes sense as one individual could provide multiple types of social support, especially if the relationship is healthy. The interconnected nature of social support suggests those without healthy support systems will have deficits across types of support. This further underlines the need to learn skills used to maintain strong relationships, especially for individuals with BPD symptoms who may struggle with this. The ISSB measures supportive behaviors done for the participant in a specific time of stress while the SPS measures dispositional support the participant perceives. The two scales had significant negative correlations. This suggests that those who reported receiving lower social support in general also reported receiving more specific support in times of need. People with smaller social support networks tend to be more isolated and have higher prevalences of anxiety and depression (Stronge et al., 2019). It is possible that during very stressful events, these individuals would garner more support from their limited network because they need it more. This is further supported by the fact that more support-seeking behavior was also significantly associated with receiving socially supportive behaviors after a stressful event but negatively correlated with general social support. Individuals with smaller networks may make a larger effort to seek out social support. The SSQ was also negatively correlated to SPS measures, suggesting that those with larger social networks reported less social support. As previously discussed, the quality of social networks is also very important to the amount of support one receives. It is possible that those with larger networks have artificially inflated them with individuals who are not providing social support. This brings up the issue of social desirability; participants may have added more names to their social networks than they actually felt belonged because they felt it was more socially acceptable. Individuals with BPD traits in particular perceive social exclusion more and may have inflated their network.

Limitations and Conclusions. My study was limited by the BPD measure. The MSI-BPD is the most common screening measure for BPD (Zimmerman & Balling, 2021). This measure has been demonstrated to have high sensitivity, or ability to detect people who will be diagnosed, and specificity, suggesting a low rate of false positive screenings (Zanarini et al., 2003c). As these authors report, the diagnostic efficiency is larger for participants 25 years of age or younger, with a sensitivity of (.90) and specificity of (.93) . Moreover, these authors found the MSF-BPD to be internally consistent with Cronbach's alpha of .77 (Melartin et al., 2009). A score of 7 was argued by Zanarini and colleagues to be an appropriate cutoff score to proceed to diagnostic evaluation. This cut score, however, has since been challenged, and argued that a lower cutoff better prioritizes sensitivity (Zimmerman & Balling, 2021). While this measure is very common for screening, it has not, to my knowledge, been used to measure BPD levels as an interval trait in subclinical populations. In my sample, the vast majority of participants had a score between 0-3, with 0 being the most common score. These results can be seen in Graph 1. This suggests that the measure was not sensitive enough to detect variability within a subclinical population. It is also possible, considering this is an academically rigorous university with an emphasis on sociality and party culture, that my sample simply had lower-than-average levels of BPD-associated traits.

There are a limited number of BPD measures to use for these purposes. The MSI-BPD is not only the most commonly used screening measure, but it is also one of the only widely accepted measures. There are no screening measures for BPD that are specific to a certain gender or age range (Videler et al., 2019). The MSI-BPD is the most frequently used measure in the literature when working with subclinical populations. Otherwise, the DSM-IV Structured Clinical Interview is used to diagnose individuals in more in-depth lab studies. To best observe

the nuances in symptom variability and severity, a measure using a spectrum approach would yield the most information. This would give a more clear picture of which symptoms are associated with which types and levels of social support.

There is also a conceptual limitation to my study. In choosing my situational stressor conditions, I chose “romantic” stressor to observe a more intimate social relationship. The “workplace” stressor was intended to act as a control. However, I did not consider that the workplace also has a social component to it and there are social stressors there as well. This made it difficult to see the differences in levels of social support because they both likely were social stressors. In future investigations, more control conditions independent of social situations should be considered, such as financial or medical stressors.

Since my study relied on self-report measures, there is potential for subjectivity and bias. These measures relied on the individuals' own assessments and perceptions of their emotions and social support which can feel personal and trigger a social desirability bias. If individuals did not want to be perceived as different they could easily tailor their answers to what they believe sounds correct. It is also possible that individuals' remembrance or perception of social support and BPD symptoms is accurate.

Another limitation of my study was the use of college students. My sample had a restricted age range because all participants were undergraduates. My participants were also overwhelmingly white, similar to the broader university population. My sample also had a substantially larger number of women than men participate. This reduces the strength of my analysis of gender differences due to the sheer lack of data on men. The sample is not representative of the broader population and thus the generalizability of my findings is limited.

There was also a large number of participants dropped because they did not answer all of the BPD screening questions. It is possible that an attrition bias was present; the individuals who dropped out of the study were somehow different than the individuals who chose to complete it. It is possible the individuals who dropped out were more impulsive or had worse mental health and that is why they did not finish it.

Conclusions. This study investigated the relationship between BPD symptoms and social support as measured in a number of different ways. My results revealed that women have significantly more symptoms of BPD than men which supports the longstanding heightened prevalence rates in women. Women were also found to engage in more varied support than men, which adds to the well-established evidence that gender is a factor in social coping with stressors. My study did not uncover many significant relationships between BPD and network size. I did find that BPD symptoms had significant correlations to the type and quality of support. The issues I faced using the MSI-BPD highlight the need for more comprehensive BPD measures for nonclinical populations outside of comprehensive clinician interviews and basic screening measures.

Looking forward, my study highlights the existence of gendered differences in BPD traits and invites further research. My study also reveals the need for more sophisticated tools to assess BPD in subclinical populations. In the future iterations of the DMS, it is likely there will be a move to spectrum based symptom profiles for personality disorders. Effective assessment tools will allow more individuals to find effective treatments and improve their well-being.

BPD is a challenging disorder to live with. In the past, there has been little success in creating comprehensive treatments. Psychotherapy does not lead to remission for most patients, who continue to meet the diagnostic criteria for BPD (Leichsenring et al., 2011). This highlights

a need for treatments that focus on managing symptoms and improving quality of life. Such treatments could include teaching tools to recognize emotions and reduce impulsivity. These positive changes could make individuals with BPD more accepted in social situations and, in turn, increase the size and quality of their social network. The social benefits will provide more support and further help individuals with BPD navigate their disorder. Recent developments in behavioral therapy have yielded promising results. The idea that BPD severity does not lessen with time has been challenged. Longitudinal studies show that over a 6-year period, most individuals who met the diagnostic requirement for BPD eventually met the criteria for remission (Zanarini et al., 2003c). These recent findings that it is common for BPD symptoms to improve suggest a more hopeful prognosis for individuals than previously expected (Zanarini et al., 2003c). The nature of BPD symptomology manifestation and the biases surrounding them can create challenges to the therapy process.

Mental illness is often stigmatized, but the stigma against individuals with BPD is common in healthcare workers. This makes it more difficult for individuals to access treatment. Healthcare assistants had the most negative experiences working with BPD patients compared to any other group and were least optimistic about BPD patient outcomes (Markham, 2003). Since individuals with BPD have difficulty with deeply personal relationships, issues of over-attachment to the therapist arise. It is common for therapists to resist taking on BPD clients to avoid over-attachment. It is important for clinicians to understand that individuals with more BPD symptoms are lacking social resources and may latch on to a therapist for fear of losing the little they have. Clinicians should emphasize the support they are able to give and what would be deemed inappropriate levels of support, such as non emergency phone contact. By emphasizing the role of the clinician within a clients social support network attachment issues should be

hindered. Ethical issues can arise when dealing with inappropriate patients and it can be difficult to maintain professionality. Because people with BPD characteristically have unstable identity and mood, it can be difficult to effectively treat. These individuals are more likely to give people pleasing answers or otherwise attempt to make their therapist hold them in high regard, which impedes therapy. When using Nondirective Support, which is common in therapy and helpful for understanding emotions, to emphasize a lack of judgement and have a supportive, understanding demenor. It is important to remember that, due to the reduced functioning of the social networks of those with BPD, the relationship with the therapist may be valued more because they can be consistently relied on to receive support. Without proper insight, the correct treatment methods can not be taken.

Many treatment methods have been utilized with patients with BPD. The American Psychiatric Association recommends psychotherapy as the primary treatment for BPD (2001, as cited in Leichsenring et al., 2011). In recent years, dialectical behavioral therapy (DBT) has been used to treat BPD and PTSD (Choi-Kain et al., 2017; Leichsenring et al., 2011). DBT, a relatively new form of treatment that aims at enhancing mindfulness to regulate emotions through stressors and more effectively manage their sensitivities and relationships with others (Choi-Kain et al., 2017). DBT is based on the idea that individuals with BPD have emotional sensitivities too strong for the environment and do not receive help addressing their problems (Choi-Kain, 2017). While DBT is typically focused on reducing the internal symptoms of BPD, imrpovements in internal regulation should manifest positive external results as well. Strong emotionality negatively impacts the ability to maintain healthy, high quality relationships within their social network. Studies have shown DBT to reduce actions such as self-harm, parasuicidal behavior, and suicidal ideation but did not cease to reach the criteria for BPD diagnosis

(Leichsenring et al, 2017), suggesting that guidance in addressing their problems is extremely beneficial. Early evidence is promising that DBT will help reduce the most troubling symptoms of BPD, but it is not without its drawbacks. DBT is an extensive time commitment, requiring weekly individual sessions, group sessions, and out-of-session contact (Choi-Kain et al, 2017). The intensity of this treatment has the potential to limit its accessibility to individuals who work or are full-time students; however, due to the strong need for social support that individuals with BPD experience, they may be more willing to spend their time in a supportive therapy environment.

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Tables and Figures

Table 1.
Descriptive Statistics of All Scale Measures

Scale	N	Min	Max	Mean	SD	Alpha
BPD Total	178	0	10	3.07	2.65	.79
SPS Total	168	27.00	69.00	42.89	7.93	.90
SPS Guidance	174	4.00	13.00	6.14	1.94	.77
SPS Reassurance of Worth	173	4.00	12.00	7.27	1.86	.72
SPS Social Integration	173	4.00	11.00	6.53	1.86	.79
SPS Attachment	174	5.00	12.00	8.34	1.33	.72
SPS Nurturance	174	4.00	14.00	8.60	1.89	.66
SPS Reliable Alliance	173	4.00	13.00	5.99	1.98	.84
Seeking Support Total	155	19.00	76.00	53.58	14.05	1.0
ISSB Total	158	40.00	184.00	108.78	29.54	.96
ISSB Non Directive Support	160	14.00	70.00	46.39	12.46	.94
ISSB Guidance and Feedback	160	14.00	67.00	38.30	12.11	.94
ISSB Tangible Assistance	165	12.00	51.00	24.55	9.10	.88
SSQ Total	177	0	54.00	30.13	16.45	.95
SSQ Satisfaction Total	158	6.00	36.00	32.13	5.39	.94

Note. Seeking = BPD = Borderline Personality Disorder; Seeking Support Total = Support Seeking; SPS = Social Provisions Scale; ISSB = Inventory of Socially Supportive Behaviors; SSQ = Social Support Questionnaire

Table 2.

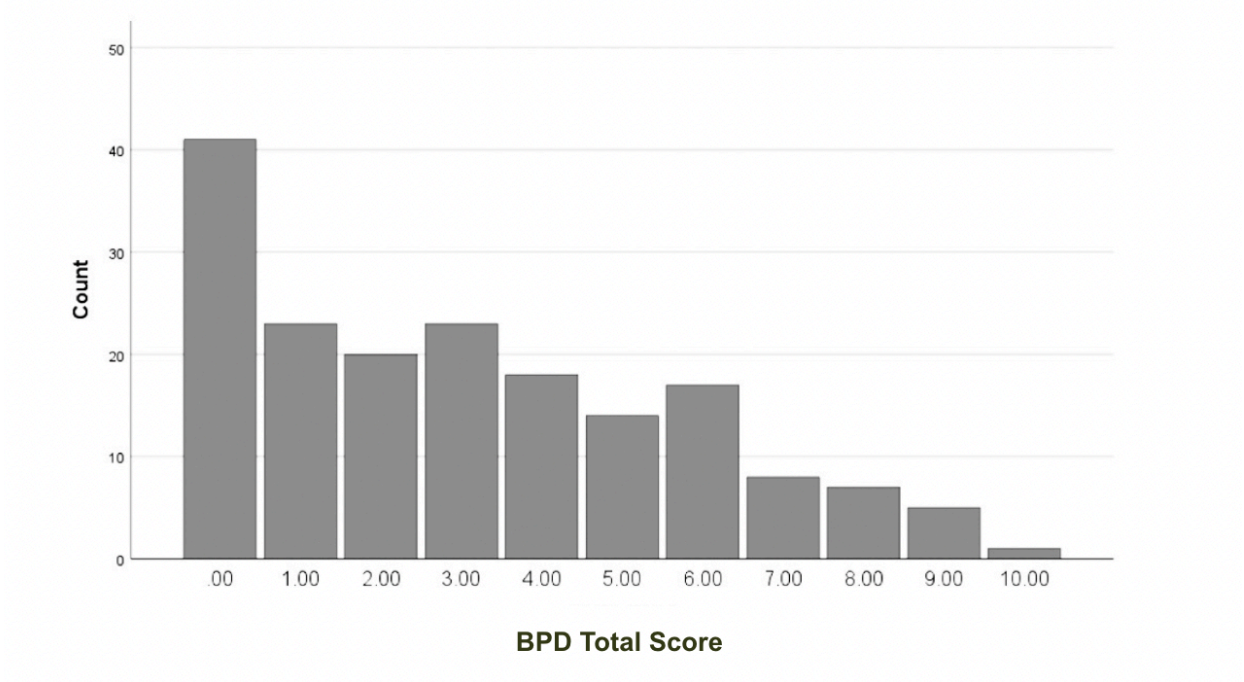
K-S Test for Normality on All Variables and Subscales

	N	Test Statistic	2-Tailed Significance
BPD Total	178	0.14	<.001
Seeking Support Total	155	0.06	0.2
ISSB Total	158	0.05	0.2
ISSB Non Directive Support	160	0.06	0.2
ISSB Tangible Assistance	165	0.1	<.001
ISSB Guidance	160	0.08	.01
SPS Total	168	0.06	0.2
SPS Guidance	174	0.18	<.001
SPS Reassurance of Worth	173	0.18	<.001
SPS Social Integration	173	0.19	<.001
SPS Attachment	174	0.18	<.001
SPS Nurturance	174	0.13	<.001
SPS Reliable Alliance	173	0.20	<.001
SSQ Total	177	0.10	<.001
SSQ Satisfaction Total	158	0.24	<.001

Note. Seeking= BPD= Borderline Personality Disorder; Seeking Support Total=Support Seeking; ISSB= Inventory of Socially Supportive Behaviors; SPS= Social Provisions Scale; SSQ= Social Support Questionnaire

Figure 1.

Frequencies of BPD scores



Note. BPD= Borderline Personality Disorder

Table 3.

Frequencies of responses for each BPD question

Question	Response	Frequency	Percentage
1. Have any of your closest relationships been troubled by a lot of arguments or repeated breakups?	Yes	58	31.7
	No	120	65.6
2. Have you deliberately hurt yourself physically (e.g., punched yourself, cut yourself, burned yourself)? Or made a suicide attempt?	Yes	29	15.8
	No	149	81.4
3. Have you had at least two other problems with impulsivity (e.g., eating binges and spending sprees, drinking too much and verbal outbursts)?	Yes	74	40.4
	No	104	56.8
4. Have you been extremely moody?	Yes	75	41.0
	No	103	56.3
5. Have you felt very angry a lot of the time? How about often acted in an angry or sarcastic manner?	Yes	120	31.1
	No	57	65.6
6. Have you often been distrustful of other people?	Yes	66	36.1
	No	112	61.2
7. Have you frequently felt unreal or as if things around you were unreal?	Yes	48	26.2
	No	130	71.0
8. Have you chronically felt empty?	Yes	49	26.8
	No	129	70.5
9. Have you often felt that you had no idea of who you are or that you have no identity?	Yes	40	21.9
	No	138	75.4
10. Have you made desperate efforts to avoid feeling abandoned or being abandoned (e.g., repeatedly called someone to reassure yourself that he or she still cared, begged them not to leave you, clung to them physically)?	Yes	50	28.1
	No	128	71.9

Table 4.

Gender Differences in BPD Scores for All Study Variables

	What is your Gender?	N	Mean	Std Deviation	t	Effect Size
Seeking Support Total	Man	27	50.41	13.57	-1.27	-.25
	Woman	124	54.21	14.25		
ISSB Total	Man	26	91.88	23.79	-3.25	-.70
	Woman	128	111.97	29.58		
ISSB Non Directive Support	Man	26	39.04	10.58	-3.36	-.72
	Woman	130	47.73	12.31		
ISSB Guidance	Man	27	33.33	10.17	-2.37	-.46
	Woman	129	39.36	12.31		
ISSB Tangible Assistance	Man	28	19.96	8.88	-2.95	-.58
	Woman	133	25.41	8.88		
SPS Total	Man	134	6.25	1.95	.68	.12
	Woman	39	5.69	1.82		
SPS Guidance	Man	134	7.49	1.85	.23	.01
	Woman	39	6.54	1.73		
SPS Reassurance of Worth	Man	134	6.63	1.87	.75	.09
	Woman	39	6.18	1.79		
SPS Social Integration	Man	135	8.39	1.35	-.32	-.10
	Woman	39	8.16	1.28		
SPS Attachment	Man	135	8.44	1.89	2.63	.51
	Woman	38	9.18	1.80		
SPS Nurturance	Man	135	6.04	2.00	-.46	-.07
	Woman	39	5.71	1.77		

SPS Reliable Alliance	Man	135	29.17	15.85	-.23	-.03
	Woman	41	32.71	18.03		
SSQ Satisfaction Total	Man	121	31.98	5.57	-1.81	-.41
	Woman	36	32.64	4.85		
SSQ Total	Man	27	31.26	15.06	.25	.05
	Woman	144	30.39	16.81		

Note. Seeking = BPD = Borderline Personality Disorder; Seeking Support Total = Support Seeking; SPS = Social Provisions Scale; ISSB = Inventory of Socially Supportive Behaviors; SSQ = Social Support Questionnaire

Table 5.

BPD Score Differences in Situational Support Measures for Stressor Situations

	Stressor Type	N	Mean	Std. Deviation	t	Effect Size
Seeking Support Total	Workplace	44	54.50	14.26	.79	.15
	Romantic	55	52.07	15.78		
ISSB Total	Workplace	46	101.43	30.82	-1.09	-.22
	Romantic	54	107.98	29.43		
ISSB Non Directive Support	Workplace	46	41.76	12.94	-1.78	-.36
	Romantic	55	46.22	12.18		
ISSB Guidance	Workplace	47	37.00	12.00	-.34	-.09
	Romantic	55	37.81	12.11		
ISSB Tangible Assistance	Workplace	48	22.79	8.67	-.74	-.17
	Romantic	56	24.13	9.53		

Note. Seeking = BPD = Borderline Personality Disorder; Seeking Support Total = Support Seeking; ISSB = Inventory of Socially Supportive Behaviors; SPS = Social Provisions Scale; SSQ = Social Support Questionnaire

Table 6.

Correlations Between BPD Scores and All Support Variables by Gender.

	Total	Men	Women
SPS Total	-.10	.05	.11
SPS Guidance	-.15*	-.04	.20*
SPS Reassurance of Worth	-.23**	.13	.24**
SPS Social Integration	-.13	.18	.10
SPS Attachment	-.12	.13	.15
SPS Nurturance	.24**	.09	-.31**
SPS Reliable Alliance	.86**	-.07	.11
SSQ Total	-.08	.16	-.09
SSQ Satisfaction Total	-.08	-.09	-.11
2. ISSB Total	-.02	-.01	-.08
3. ISSB Non Directive Support	.08	.06	.01
4. ISSB Guidance	-.09	.05	-.13
5. ISSB Tangible Assistance	-.05	-.27	-.07
6. Seeking Support Total	.09	.29	.05

Note. Seeking= BPD= Borderline Personality Disorder; Seeking Support Total=Support Seeking; ISSB= Inventory of Socially Supportive Behaviors; SPS= Social Provisions Scale; SSQ= Social Support Questionnaire

*. p< .05

**. p<.01

Table 7.

Correlations between BPD and Situational Support Measures in the Romantic and Workplace Condition

	Workplace	Romantic
2. ISSB Total	.001	.16
3. ISSB Non Directive Support	.06	.31*
4. ISSB Guidance	-.01	.06
5. ISSB Tangible Assistance	-.06	-.03
6. Seeking Total	.06	.26

Note. BPD = Borderline Personality Disorder; ISSB = Inventory of Socially Supportive Behaviors; Seeking Total = Support Seeking

*. p< .05

**. p<.01

Table 8.
Differences in social support in high and low BPD scores.

	BPD Level	N	Mean	Std Deviation	t	Effect Size Cohen's d
SPS Total	Low	116	42.35	7.40	-1.22	-.21
	High	51	43.98	9.02		
SPS Guidance	Low	121	5.93	1.82	-1.86	-.31
	High	51	6.53	2.14		
SPS Reassurance of Worth	Low	121	7.07	1.84	-2.04	-.34
	High	51	7.69	1.78		
SPS Social Integration	Low	121	6.39	1.78	-1.41	-.24
	High	51	6.82	2.03		
SPS Attachment	Low	122	8.21	1.32	-1.91	-.32
	High	51	8.63	1.34		
SPS Nurturance	Low	122	8.82	1.72	2.25	.38
	High	51	8.12	2.20		
SPS Reliable Alliance	Low	120	5.88	1.80	-.95	-.16
	High	51	6.20	2.30		
ISSB Total	Low	111	108.76	30.05	-.08	.01
	High	46	108.35	28.73		
ISSB Nondirective Support	Low	112	45.96	12.67	-.59	-.10
	High	47	47.23	12.08		
ISSB Guidance	Low	111	38.66	12.09	.49	.09
	High	47	37.62	12.16		
ISSB Tangible Assistance	Low	114	24.64	9.29	.07	.01
	High	49	24.53	8.78		

Seeking Total	Low	108	52.63	13.94	-1.27	-.23
	High	45	55.80	14.37		
SSQ Satisfaction Total	Low	109	32.43	5.67	.37	.21
	High	47	31.43	4.12		

Note. Seeking = BPD = Borderline Personality Disorder; Seeking Support Total = Support Seeking; SPS = Social Provisions Scale; ISSB = Inventory of Socially Supportive Behaviors; SSQ = Social Support Questionnaire
High BPD is categorized as a score of 5-10, while low BPD is categorized as a score of 0-4

Appendix A.

Informed Consent

CONSENT FORM FOR HUMAN SUBJECTS RESEARCH
BUCKNELL UNIVERSITY

Project Name:
Personality, Stress, and Social Relations

Purpose of the research:

The purpose of this study is to survey and understand the relationship between social networks and the ability to handle stressors in different personalities. We also seek to understand how the method of seeking social support can influence the management of stressors.

General plan of the research:

You will be presented with a brief, one-time survey expected to take no more than 15 minutes. The survey will present you with a short answer question about your worst recent relationship stressor. You will also be asked to answer survey questions pertaining to personality traits and social networks. These questions will be on a scale based on how strongly you agree or disagree with the statements.

Your participation is voluntary and you may withdraw from participation at any time with no penalty. You may decline to answer questions, however, incomplete data responses may result in exclusion from participation in the drawing for gift cards.

Benefits of Participation:

The possible benefits of participating in the study will include positive feelings associated with helping the community further important research. It is also possible that answering the various surveys and reflecting on life events and habits provide new clarity to inform future decisions. Further, participants providing complete data and signifying they would like to be included will be entered in a drawing to win one of five $25 Amazon gift cards if they provide their BUID number.

Confidentiality

All information in this study will be strictly confidential. Data will be housed on password protected computers. Confidentiality will be ensured as Qualtrics will not collect email or IP addresses. The data of those who participate in the lottery will be deidentified to keep the data anonymous. No references in oral or written reports would connect you to the study.

Discomfort

The investigators will do everything possible to prevent or reduce discomfort and risk, but it is not possible to predict everything that might occur. For example, you may experience some psychological distress when providing information regarding a recent relationship stressor. However, this distress and discomfort, if experienced, is expected to be mild and no other risks are anticipated.

If you have any questions or concerns about your rights in this research study, please contact Dr. Eric Kennedy, the IRB chair at Bucknell University at 570-577-2013 or irbchair@bucknell.edu. The Bucknell IRB will not be able to answer some study-specific questions. However, you may contact the Bucknell IRB if the research staff cannot be reached or if you wish to speak with someone other than the research staff. If you have any study related questions or if any problems arise, please contact Dr. JT Ptacek, Ext. 7 – 1694 (ptacek@bucknell.edu), O'Leary 211.

Acknowledgment of Consent

I have read and understand the above description of the research. The investigator clarified anything I did not understand, and all of my questions were answered to my satisfaction. I understand that I am free to withdraw from participation at any time and that if I do discontinue participation I will incur no penalty. I agree to participate in this research, and I acknowledge that by signing this document I give my consent to participate in this study and that I am 18 years of age or older.

Name:_____

Signature:_____

Date:_____

Appendix B.

Survey Measures

MacLean Screening Instrument for BPD

1. Have any of your closest relationships been trouble by a lot of arguments or repeated breakups?

Yes____No____

2. Have you deliberately hurt yourself physically (e.g., punched yourself, cut yourself, burned yourself)?

Yes____No____

How about made a suicide attempt?

Yes____No____

3. Have you had at least two other problems with impulsivity (e.g., eating binges and spending sprees, drinking too much and verbal outbursts)?

Yes____No____

4. Have you been extremely moody?

Yes____No____

5. Have you felt very angry a lot of the time? How about often acted in an angry or sarcastic manner?

Yes____No____

6. Have you often been distrustful of other people?

Yes____No____

7. Have you frequently felt unreal or as if things around you were unreal?

Yes____No____

8. Have you chronically felt empty?

Yes____No____

9. Have you often felt that you had no idea of who you are or that you have no identity?

Yes____No____

10. Have you made desperate efforts to avoid feeling abandoned or being abandoned (e.g., repeatedly called someone to reassure yourself that he or she still cared, begged them not to leave you, clung to them physically)?

Yes____No____

SPS

This survey your relationship with other people. Please indicate much each statement describes your situation by using these responses. Please respond using the scale below by circling the appropriate number.

		Strongly Disagree	Disagree	Agree	Strongly Agree
1.	There are people I know will help me if I really needed it.	1	2	3	4
2.	I do not have close personal relationships with other people.	1	2	3	4
3.	There is no one I can turn to in times of stress.	1	2	3	4
4.	There are people who call on me to help them.	1	2	3	4
5.	There are people who like the same social activities I do.	1	2	3	4
6.	Other people do not think I am good at what I do.	1	2	3	4
7.	I feel responsible for the taking care of someone else.	1	2	3	4
8.	I am with a group of people who think the same way I do about things.	1	2	3	4
9.	I do not think other people respect what I do.	1	2	3	4
10.	If something went wrong, no one would to help me.	1	2	3	4
11.	I have close relationships that make me feel good.	1	2	3	4
12.	I have someone I can talk to about decisions in my life.	1	2	3	4
13.	There are people who value my skills and abilities.	1	2	3	4
14.	There is no one who has the same interests and concerns as me.	1	2	3	4
15.	There is no one who needs me to take care of them.	1	2	3	4
16.	I have a trustworthy person I can turn to if I have problems.	1	2	3	4
17.	I feel a strong emotional tie with at least one other person.	1	2	3	4
18.	There is no one I can count on for help if I really needed it.	1	2	3	4
19.	There is no one I feel comfortable talking about problems with.	1	2	3	4

20.	There are people who admire my talents and abilities.	1	2	3	4
21.	I do not have a feeling of closeness with anyone.	1	2	3	4
22.	There is no one who likes to do the things I do	1	2	3	4
23.	There are people I can count on in an emergency.	1	2	3	4
24.	No one needs me to care for them.	1	2	3	4

Social Support Questionnaire

Instructions: The following questions ask about people in your environment who provide you with help or support. Each question has two parts. For the first part, list all the people you know, excluding yourself, whom you can count on for help or support in the manner described. Give the persons' initials and their relationship to you (see example). Do not list more than one person next to each of the numbers beneath the question.

For the second part, circle how satisfied you are with the **overall** support you have.
If you have had no support for a question, check the words "No one," but still rate your level of satisfaction. Do not list more than nine persons per question.

Please answer all the questions as best you can. All responses are confidential.

Example

1. Whom can you trust with information that could get you in trouble?

___No one	1) TN (brother)	4) MM (dad)	7)
	2) LM (friend)	5) RT (boss)	8)
	3) RS (friend)	6)	9)

How satisfied?

Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied
6	5	4	3	2	1

---

1. Whom can you really count on to be dependable when you need help?

___No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied?

Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied
6	5	4	3	2	1

2. Whom can you really count on to be dependable when you need help?

___No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied?

Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied
6	5	4	3	2	1

3. Who accepts you totally, including both your worst and best points?

___No one 1) 4) 7)
2) 5) 8)
3) 6) 9)

How satisfied?

Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied
6	5	4	3	2	1

4. Whom can you really count on to care about you, regardless of what is happening to you?

___No one 1) 4) 7)
2) 5) 8)
3) 6) 9)

How satisfied?

Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied
6	5	4	3	2	1

5. Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?

___No one 1) 4) 7)
2) 5) 8)
3) 6) 9)

How satisfied?

Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied
6	5	4	3	2	1

6. Whom can you count on to console you when you are very upset?

___No one 1) 4) 7)
2) 5) 8)
3) 6) 9)

How satisfied?

Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied
6	5	4	3	2	1

Short Answer Questions for Situation-Specific Stressors

Recount the worst workplace-related stressor you had with a colleague in the past 6 months. Please include details of the situation as well as your feelings about it. Has the stressor been resolved or how have you attempted to resolve it?

Recount the worst relationship-related stressor you had with someone you have seen romantically in the past 6 months. Please include details of the situation as well as your feelings about it. Has the stressor been resolved or how have you attempted to resolve it?

Support Seeking

We are interested in how people respond when they confront difficult or stressful situations. There are lots of ways to try to deal with stress, some that focus on seeking support are which are listed below. This questionnaire asks you to indicate what you **typically** do these things to help you deal with stress. Please respond to every statement even though some of them sound similar.

I do not do this at all	I do this a little bit	I do this a medium amount	I do this a lot.
1	2	3	4

1.	I ask people who have had similar experiences what they do.	1	2	3	4
2.	I talk to someone about how I am feeling.	1	2	3	4
3.	I try to get advice from someone about what to do.	1	2	3	4
4.	I try to get emotional support from friends or relatives.	1	2	3	4
5.	I talk to someone to find out more about the situation.	1	2	3	4
6.	I discuss my feelings with someone.	1	2	3	4
7.	I talk to someone who can do something concrete about the situation.	1	2	3	4
8.	I get sympathy and understanding from someone.	1	2	3	4
9.	I let my feelings out to a friend	1	2	3	4
10.	I accept sympathy and understanding from someone	1	2	3	4
11.	I talk to people about the situation because talking about it helps me to feel better	1	2	3	4
12.	I confide my fears and worries to a friend or relative	1	2	3	4
13.	I tell people about the situation because just talking about it help me to come up with solutions	1	2	3	4
14.	I go to someone (friend or professional) in order to help me feel better	1	2	3	4
15.	I go to a friend to help me feel better about the problem	1	2	3	4
16.	I went to a friend for advice on how to change the situation	1	2	3	4
17.	I accept sympathy and understanding from friends who have had the same problem	1	2	3	4
18.	I accept help from a friend or relative	1	2	3	4
19.	I seek reassurance from those who know me best	1	2	3	4

Inventory of Socially Supportive Behaviors (ISSB)

INSTRUCTIONS

We are interested in learning about some of the ways that you feel people have helped you or tried to make life more pleasant for you over the while you were dealing with the event you described *past four weeks.* Below you will find a list of activities that other people might have done for you, to you, or with you in recent weeks. Please read each item carefully and indicate how often these activities happened to you during the *past four weeks.*

Use the following scale to make your ratings:

A. Not at all
B. Once or twice
C. About once a week
D. Several times a week
E. About every day

Make all of your ratings on the answer sheet that has been provided. If, for example, the item:

45. Gave you a ride to the doctor.

happened once or twice during the past four weeks, you would make your rating like this:

A B C D E
45. ↙ ↑ ↙ ↙ ↙

Please read each item carefully and select the rating that you think is the most accurate

During the past four weeks, how often did other people do these activities for you, to you, or with you:

1. Looked after a family member when you were away.
2. Was right there with you (physically) in a stressful situation.
3. Provided you with a place where you could get away for awhile.
4. Watched after your possessions when you were away (pets, plants, home, apartment, etc.).
5. Told you what she/he did in a situation that was similar to yours.
6. Did some activity with you to help you get your mind off of things.
7. Talked with you about some interests of yours.
8. Let you know that you did something well.
9. Went with you to someone who could take action.
10. Told you that you are OK just the way you are.
11. Told you that she/he would keep the things that you talk about private - just between the two of you.

12. Assisted you in setting a goal for yourself.
13. Made it clear what was expected of you.
14. Expressed esteem or respect for a competency or personal quality of yours.
15. Gave you some information on how to do something
16. Suggested some action that you should take.
17. Gave you over $25.
18. Comforted you by showing you some physical affection.
19. Gave you some information to help you understand a situation you were in.
20. Provided you with some transportation.
21. Checked back with you to see if you followed the advice you were given.
22. Gave you under $25.
23. Helped you understand why you didn't do something well.
24. Listened to you talk about your private feelings.
25. Loaned or gave you something (a physical object other than money) that you needed.
26. Agreed that what you wanted to do was right.
27. Said things that made your situation clearer and easier to understand.
28. Told you how he/she felt in a situation that was similar to your.
29. Let you know that he/she will always be around if you need assistance.
30. Expressed interest and concern in your well-being.
31. Told you that she/he feels very close to you.
32. Told you who you should see for assistance.
33. Told you what to expect in a situation that was about to happen.
34. Loaned you over $25.
35. Taught you how to do something.
36. Gave you feedback on how you were doing without saying it was good or bad.
37. Joked and kidded to try to cheer you up.
38. Provided you with a place to stay.
39. Pitched in to help you do something that needed to get done.
40. Loaned you under $25.