GENDER DISPARITIES IN PSYCHOPATHY, PTSD AND DEPRESSION AMONG ADULTS IN PAKISTAN: DEPRESSION AS A MEDIATOR

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Abstract. *With growing awareness and destigmatization of mental health issues, there's an increasing recognition of the prevalence and impact of conditions like PTSD, psychopathy, and depression among adults. Understanding these conditions helps to address misconceptions and promote mental health literacy. Studying these factors helps to understand their impact and develop effective coping strategies and support systems. Gender disparities do not exist in isolation but intersect with other social determinants of health, such as age, socioeconomic status, education, and access to healthcare. For this purpose, sample of 381 adults between the ages of 18 and 45 was taken from different geographical region of Pakistan who experienced any kind of traumatic situation through snowball sampling. Pearson Product Correlation analysis was use to find correlation of demographics variables with study variables. Socioeconomic status differences were found out by independent t-test. Results of the study revealed that depression mediates the relationship between PTSD and psychopathy. Findings from this research can inform evidence-based policy recommendations aimed at reducing gender disparities in mental health outcomes and improving access to culturally appropriate mental health services in Pakistan. By amplifying the voices of marginalized groups and advocating for gender-sensitive policies, researchers can contribute to broader social change and promote mental health equity.*

Keywords: Psychopathy, PTSD, depression, and gender disparities

Introduction

Gender disparities in mental health outcomes are well-documented globally, with women often experiencing higher rates of depression and PTSD compared to men. However, research in Pakistan specifically is limited. Investigating gender differences in psychopathy, PTSD, and depression can shed light on unique culture cultural, social, and systemic factors contributing to mental health disparities within the Pakistani context. Pakistan's cultural norms, gender roles, and

societal expectations may influence the manifestation and reporting of mental health symptoms differently for men and women. Exploring these dynamics can provide valuable insights into how cultural factors intersect with mental health outcomes, informing culturally sensitive interventions and policies. Understanding gender-specific patterns of psychopathy, PTSD, and depression is pivotal for developing targeted prevention and intervention strategies. By identifying which gender is more vulnerable to each condition and the factors contributing to these disparities, public health efforts can be tailored to address the specific needs of men and women in Pakistan. Researching gender differences in psychopathy, PTSD, and depression allows for an intersectional analysis, uncovering how multiple axes of identity intersect to shape mental health outcomes among adults in Pakistan. PTSD, psychopathy, and depression have significant public health implications due to their high prevalence, associated disability, and economic burden. Investigating their causes, risk factors, and treatment options can inform public health policies and interventions aimed at prevention and management. Global events such as armed conflicts, natural disasters, and pandemics can exacerbate mental health issues among adults, leading to increased rates of PTSD, depression, and other related conditions. Investigating gender disparities in psychopathy, PTSD, and depression among adults in Pakistan not only addresses a significant gap in the literature but also has important implications for public health, policy, and advocacy efforts aimed at promoting mental health equity and well-being in the region.

Indeed, individuals exhibit certain psychopathic tendencies, even if they don't meet the clinical criteria for the condition itself. Research from PsychopathyIs suggests that up to 30% of the population may demonstrate some level of diminished empathy, willingness to take risks, and an inflated sense of self, though a much smaller percentage exhibit these traits to an extreme degree. However, the reality of psychopathy is much more complex than these oversimplified stereotypes suggest. While individuals with the condition often exhibit concerning behaviors such as lack of empathy and remorse, feelings of grandiosity, impulsivity, and in some cases, aggression or violence, recent discoveries indicate that psychopathy exists on a spectrum with varying degrees and manifestations.

Psychopathy

According to the American Psychiatric Association (APA, 2022), PTSD is a psychiatric disorder that may develop in people who have experienced or witnessed a traumatic event such as a war/combat experience, a serious accident, terrorist acts, rape/sexual assault, or other types of violence or threats to life.

Post-Traumatic Stress Disorder (PTSD)

Psychopathy is characterized by a pervasive pattern of impaired empathy and remorse, alongside bold, disinhibited, and egocentric traits. Despite appearing superficially charming and poised, individuals with psychopathy often experience underlying affective disturbances and impulse control deficits.

While both men and women can develop PTSD after experiencing trauma, studies have shown gender differences in the prevalence, symptom presentation, and risk factors for PTSD. For example, women are more likely to experience PTSD than men, and they often report different types of trauma and coping strategies (Olff et al., 2007).

Depression

Depressive disorder, commonly known as depression, is a prevalent mental health condition that can affect individuals indiscriminately. It manifests as prolonged periods of low mood or diminished enjoyment or interest in activities, distinct from typical fluctuations in mood and everyday emotions.

H1: Depression is significantly positive associated with PPTS and PTSD.

Psychopathy and depression

Psychopathy is characterized by a lack of empathy, emotional detachment, and a focus on self-gratification. Depression, on the other hand, involves sadness, feelings of worthlessness, and anhedonia (loss of pleasure). These core features seem to contradict each other. Some research suggests psychopaths might be less susceptible to depression due to their blunted emotional responsiveness. They might not experience the same level of emotional distress that contributes to depression in others (Lynam & Gudjonsson, 2006). There's a possibility that specific psychopathic traits like impulsivity and poor frustration tolerance could contribute to negative life experiences that might indirectly lead to depressive symptoms (Harpur et al., 2014). Psychopaths can be skilled at manipulating situations and may underreport or mask depressive symptoms to maintain a positive self-image or gain something (Hare, 1991). This presents challenges in accurately assessing depression in this population. An examination explored the roles of anxiety and depressive symptoms as potential moderators in the relationship between psychopathy and suicidal ideation. Findings confirmed a noteworthy positive correlation between secondary psychopathy and suicidal ideation. Furthermore, depression and physiological anxiety were found to moderate the link between secondary psychopathy and suicidal ideation (Pennington et al., 2015). Ashley and Holder (2014) demonstrated that psychopathy was linked to elevated levels of depression and negative affect, indicating that psychopathy could predict an increase in depression. Psychopathy exhibited a positive and significant correlation with depression. Given that the coexistence of psychopathy and depression could anticipate various detrimental psychosocial issues and potentially severe spiritual concerns, it was crucial to ascertain the manner and extent to which psychopathy and depression interact. This understanding would aid psychologists and psychiatrists in clarifying the constructs being assessed (Šram, 2017).

Posttraumatic stress disorder (PTSD) and depression

The simultaneous presence of posttraumatic stress disorder (PTSD) and depression subsequent to traumatic events is collectively linked with functional impairment (Contractor et al., 2018). Posttraumatic stress disorder (PTSD) and major depressive disorder/episode (MDD/MDE) commonly coincide after traumatic experiences (Bonde et al., 2016; Rytwinski et al., 2013). Although symptoms of PTSD and depression often show a correlation, research generally suggests that they are separate disorders (Barnes et al., 2018; Grant et al., 2008).

Women exposed to trauma might be more likely to develop depression due to their stress response and coping mechanisms. However, men with PTSD might also experience depression, but it may manifest differently.

Psychopathy and Posttraumatic stress disorder (PTSD)

A study investigated the interplay among psychopathy, exposure to violence, and posttraumatic stress disorder (PTSD) in relation to antisocial behavior among delinquent adolescents. The findings revealed independent associations between psychopathy, violence exposure, PTSD, and self-reported engagement in delinquency (Tsang, 2018). Limited research has delved into the connection between psychopathy and posttraumatic stress disorder (PTSD), revealing varying associations among different facets of psychopathy. These findings shed light on the relationships between psychopathy, trauma, and PTSD (Blonigen, 2012). Previous studies suggest that the impact of trauma differs depending on the dimension of psychopathic traits, with impulsive-antisocial traits consistently showing stronger associations with trauma histories compared to interpersonal-affective traits. Additionally, there is evidence indicating that the connection between interpersonal-affective traits and trauma may be more pronounced in men than in women. Research exploring the connections between psychopathy and internalizing disorders, such as posttraumatic stress disorder (PTSD) and depression, has demonstrated a positive link with antisocial traits. The results unveiled a direct correlation between antisocial characteristics and the severity of self-reported symptoms of PTSD and depression (Kavish, 2021).

H2: Depression mediates the relationship between PPTS and PTSD.

Research indeed indicates a significant positive association between psychopathology and Post-Traumatic Stress Disorder (PTSD). One study supporting conducted by Shevlin and Elklit (2012) found a strong correlation between psychopathological symptoms, particularly those associated with personality disorders, and PTSD symptomatology. Individuals with higher levels of psychopathology were more likely to develop and exhibit symptoms of PTSD following traumatic experiences. This association underscores the complex interplay between psychopathology and trauma-related disorders, highlighting the need for comprehensive assessment and treatment approaches for individuals affected by both conditions.

The comorbidity between anxiety disorders and unipolar mood disorders, which include depression. It highlights how psychopathological factors, such as maladaptive personality traits, cognitive patterns, and emotional dysregulation, contribute to the development and maintenance of depression. The presence of psychopathological features often exacerbates depressive symptoms and complicates treatment outcomes, emphasizing the need for integrated approaches in addressing both conditions simultaneously (Mineka, 1998).

A study delves into the relationship between PTSD and depression following trauma exposure. It demonstrates a significant positive association between the two conditions, with individuals experiencing PTSD being at a heightened risk for developing comorbid depression. The study underscores the complex interplay between trauma, PTSD, and depressive symptoms, highlighting the need for comprehensive assessment and treatment strategies to address both disorders effectively O'Donnell et al., (2004). The relationship between Post-Traumatic Stress Disorder (PTSD) and depression is well-established, with research consistently demonstrating a significant positive association. Both disorders share core symptoms like sadness, hopelessness, anhedonia (loss of pleasure), and difficulties with concentration and sleep. This overlap contributes to a high co-occurrence rate (Kessler et al., 1997). Research suggests potential neurobiological overlaps between PTSD and depression. Both conditions might involve dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis, a key stress response system, leading to heightened stress levels and emotional dysregulation (Bremner et al., 2000). Exposure to traumatic events is a major risk factor for both PTSD and depression. The intense stress and negative emotions associated with trauma can trigger depressive symptoms (Classen et al., 2017). Each condition can worsen the other, creating a cyclical pattern. Depression can make it harder to cope with PTSD symptoms (e.g., flashbacks, nightmares), and vice versa, leading to a worsening of both conditions (Slofstra et al., 2012).

Not everyone with PTSD develop depression, and some may experience depression independently of trauma. Individual differences in factors like coping mechanisms and social support can influence the likelihood of co-occurrence. Overall, the current research suggests a strong positive association between PTSD and depression. Both conditions share overlapping symptoms, neurobiological underpinnings, and risk factors, and they can exacerbate each other.

A meta-analysis by Kessler et al. (2017) found a significantly higher prevalence rate of PTSD in women compared to men.

H3: Age and gender correlated with PTSD, PPTS and BDI.

Study conducted by Breslau and colleagues (1991) investigated risk factors for PTSD-related traumatic events. One of the factors examined was age, and the

study found that younger age was associated with a higher risk of exposure to traumatic events and subsequently developing PTSD. This association underscores the vulnerability of younger individuals to traumatic experiences and the development of PTSD, possibly due to factors such as increased exposure to high-risk environments or less effective coping mechanisms.

In the study by Skeem and Cauffman (2003), the focus is on psychopathy in adolescence, but it provides insights into the developmental aspects of psychopathy across different age groups. The findings suggest that psychopathic traits can manifest early in life and may persist into adulthood. While the study primarily focuses on adolescence, it acknowledges the continuum of psychopathic traits across the lifespan and provides valuable insights into the developmental trajectory of psychopathy.

Blazer's comprehensive review article explores depression in late life, focusing on older adults. The study discusses how the prevalence and presentation of depression may vary across different stages of the lifespan, including older age. It highlights factors such as chronic health conditions, social isolation, and life transitions that may contribute to the development or exacerbation of depressive symptoms in older adults.

A study conducted in Great Britain found that while overall rates of psychopathic traits were higher in men than women, there were significant gender differences in the specific traits associated with psychopathy. Men were more likely to exhibit traits related to antisocial behavior, while women were more likely to exhibit traits related to manipulation and emotional detachment. This suggests that the association between psychopathy and gender is complex and may vary based on specific traits (Coid et al., 2009). Research suggests that psychopathy is more commonly diagnosed in males than females. This gender disparity is observed across various populations, including forensic samples and community samples (Cale & Lilienfeld, 2002).

STARD (Sequenced Treatment Alternatives to Relieve Depression) investigated gender differences in depression symptoms and treatment response. It found that women had a higher prevalence of depression and were more likely to report symptoms such as sadness, guilt, and sleep disturbances compared to men. These findings highlight the gender disparity in depression rates and symptomatology (Marcus, 2005). The severity of psychopathy and maladaptive coping were notably associated with heightened symptoms of PTSD and depression, whereas adaptive coping was only linked to reduced depression. Additionally, the study found that encountering various forms of victimization was predictive of increased symptoms of both PTSD and depression (Forth et al., 2022). Depression is more prevalent in women than men, with females consistently reporting higher rates of depressive symptoms and diagnoses across different age groups and cultural contexts. Several factors, including hormonal fluctuations, socialization, and interpersonal relationships, contribute to this gender disparity (Albert, 2015).

H4. There are socioeconomic status differences on PTSD, PPTS and BDI.

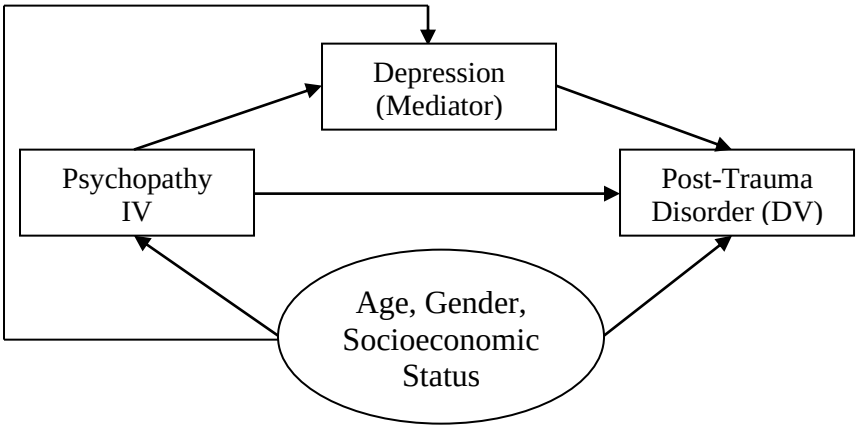
Socioeconomic status (SES) is a significant factor influencing the risk of developing PTSD after exposure to a traumatic event. People from lower socioeconomic backgrounds are more likely to experience PTSD compared to those with higher SES (Rosenthal et al., 2015). Lower SES can increase exposure to potentially traumatic events. Individuals might face violence in their communities unstable housing situations (Galea et al., 2005), or dangerous work environments ([National Center for PTSD, 2023]), all of which can be traumatic. Following a trauma, financial strain, lack of access to quality healthcare, and inadequate social support systems can hinder healing and increase the risk of developing PTSD (Neria et al., 2008). Lower SES can make accessing these essential resources more challenging. Poverty and social disadvantage often lead to chronic stress. This constant stress can deplete resilience and make coping with a traumatic event more difficult, potentially leading to PTSD (Kessler et al., 2010).

Some studies suggest a correlation between lower SES and higher psychopathy rates (Ward & Mannion, 2006), others haven't found a significant association (DeLisi et al., 2017). Childhood maltreatment, violence in disadvantaged neighborhoods, and other forms of adversity are risk factors for psychopathy. Lower SES can increase the likelihood of experiencing these conditions (Moffitt et al., 2006). Lower SES households might have limited resources for parental supervision, potentially creating an environment where psychopathic traits go unchecked (Frick & Mar see, 2006). Limited access to quality education and positive social interactions can hinder the development of prosocial behaviors, potentially contributing to psychopathy (Lynam et al., 2007). People from lower socioeconomic backgrounds are diagnosed with depression at a higher rate compared to those with higher SES (American Psychological Association, 2023). Lower SES can increase exposure to stressful life events, such as financial strain, unstable housing, and lack of access to quality healthcare (Kessler et al., 1994). These stressors can trigger or worsen depression. Following a difficult life event, limited financial resources and lack of access to mental health care can hinder recovery from depression (Phelan et al., 1995). Lower SES can be associated with social isolation, lack of social support networks, and discrimination. These factors can negatively impact mental health and increase the risk of depression (Kawachi & Berkman, 2003). Chronic stress associated with poverty might influence brain chemistry and increase vulnerability to depression (McEwen, 2012).

Method and procedure

Psychopathic Personality Traits Scale (Boduszek et al., 2016), PTSD CheckList and Beck Depression Inventory (Beck et. al., 1961) with demographics were used. Participants were targeted from different provinces of Pakistan. Firstly, they were informed by the actual purpose of the study with the help of trained research assistants then they were asked about participation willingly.

Conceptual Model



Results

Table 1 *Demographic Characteristics of Participants (N = 381)*

Variables	Category	*N*	%
Gender	Male	188	49.34%
	Female	193	50.65%
Age	18-30	200	52.49%
	31-45	181	47.50%
Socioeconomic status	High	190	49.86%
	Low	191	50.13%

Note. Demographic characteristics of the gender, age and socioeconomic status.

This dataset includes a balanced gender distribution, with slightly more females than males. The age distribution indicates a marginally higher number of participants in the younger age group (18-30) compared to the older age group (31-45). Socioeconomic status is evenly distributed, with nearly equal numbers of participants from high and low socioeconomic backgrounds. This demographic diversity enables a comprehensive analysis of the factors influencing pro-environmental behavior among adults in Pakistan.

Table 2 *The Psychometric Properties of the Psychopathy Checklist – Revised (PCL-R) (PPTS), PTSD Checklist – Civilian Version (PCL-C) (PTSD), and the Beck Depression Inventory (BDI; N = 381)*

Variables	*M*	*SD*	Range	Cronbach's α
PPTS	54.04	10.13	0-80	.91
PTSD	47.02	8.84	17-85	.80
BDI	7.97	17.45	0-84	.99

Note. PCQ-WSCS = Psychosocial Capital Scale, MS-A = Mobbing Scale, and HAS-PCQ = Health Assessment Scale; *N* = Number of Items; *M* = Mean, *SD* = Standard Deviation.

Table 2 offers a thorough overview of the reliability and variability of the measures employed in the study, facilitating a robust analysis of the factors under investigation.

Table 3 *Correlation among Sub-Scales of Psychopathy Checklist – Revised (PCL-R) (PPTS), PTSD Checklist – Civilian Version (PCL-C) (PTSD), and the Beck Depression Inventory (BDI); N = 381)*

Scale	*N*	*M*	*SD*	*1*	*2*	*3*	*4*	*5*	*6*
AR	5	13.35	3.02	-	.685**	.85**	.79**	.36**	.57**
CR	5	13.93	2.24	-	-	.56**	.64**	.21**	-.51**
IPM	5	13.19	3.39	-	-	-	.69**	.31**	.58**
EGO	5	13.56	2.75	-	-	-	-	.31**	.54**
PTSD	17	47.02	8.84	-	-	-	-	-	.16**
BDI	21	7.97	17.4	-	-	-	-	-	-

Note. AR = Affective Responsiveness; CR = Cognitive Responsiveness; IPM= Interpersonal Manipulation; EGO = Egocentricity; N = Number of Items; M = Mean; SD = Standard Deviation. *p <. 05, **p <. 01.

Table 3 shows the positive correlations among Affective Responsiveness (AR), Cognitive Responsiveness (CR), Interpersonal Manipulation (IPM), and Egocentricity (EGO). It also includes the number of items (N), mean (M), and standard deviation (SD) for each variable.

Table 4 *Correlations among the Psychopathy Checklist – Revised (PCL-R) (PPTS), PTSD Checklist – Civilian Version (PCL-C) (PTSD), and the Beck Depression Inventory (BDI), age and gender (N =381)*

Variables	*N*	*M*	*SD*	*1*	*2*	*3*	*4*	*5*
PPTS	20	54.04	10.13	-	-.34**	-.63**	.50**	.59**
PTSD	17	47.02	8.84	-	-	.16**	.33**	.34**
BDI	21	7.97	17.5	-	-	-	.47**	.46**
Age	-	30.2	6.8	-	-	-	-	-
Gender	-	1.51	.50	-	-	-	-	-

Table 4 demonstrates that there is positive significant correlation among all the study variables, as well as their correlation with demographic variables.

Table 5 *Mean Differences of Socioeconomic Status on the Psychopathy Checklist – Revised (PCL-R) (PPTS), PTSD Checklist – Civilian Version (PCL-C) (PTSD), and the Beck Depression Inventory (BDI; N = 381)*

	High	*Low*
	N=190	*N= 191*

Variable	*M*	*SD*	*M*	*SD*	*t*(379)	*P*	Cohen's *d*
PPTS	47.91	11.58	60.00	1.00	-14.49	.000	1.47
PTSD	43.99	10.72	49.96	5.01	-6.99	.000	0.71
BDI	16.16	22.05	4.00	1.00	10.1	.000	0.77

Note. N = 381; n = 190 high, n = 191 low; *M* = Mean; *SD* = Standard Deviation. ****p* <. 001.

The table above presents the mean differences in Socioeconomic Status (SES) on the Psychopathy Checklist – Revised (PCL-R) (PPTS), PTSD Checklist – Civilian Version (PCL-C) (PTSD), and the Beck Depression Inventory (BDI; N = 381). These differences were determined using the t-test to assess the impact of SES.

Table 6 *Mediating Role of depression between psychopathy and posttraumatic stress disorder among adults (N = 381)*

Total effect	SE	T	P	LLCI	ULCI
0.3919	0.042	7.10	.0000	.2163	.3819
Direct effect	SE	T	P	LLCI	ULCI
0.3455	0.054	6.41	.0000	.2395	.4515
Indirect effect	SE		Range		
0.0464	.0394		-.1259 - .0314		

Table 6 shows that depression mediates the relationship between psychopathy and posttraumatic stress disorder among adult as well as psychopathy has significant effect on posttraumatic stress disorder among adults.

Discussion

Table 3. Affective responsiveness refers to the ability to experience and express emotions. Depression, on the other hand, is characterized by a significant reduction in positive emotions and an increase in negative emotions (American Psychiatric Association [APA], 2022). Depressed individuals often experience emotional blunting, meaning they have a diminished ability to feel and respond to emotions, both positive and negative. This blunted responsiveness is a core symptom of depression (Leppänen, 2005). Limited emotional responsiveness can exacerbate depression. The inability to experience joy or pleasure from activities that were previously enjoyable can lead to a sense of hopelessness and withdrawal, further deepening the depression (Watson & Andrews, 2002).

Cognitive responsiveness refers to a person's ability to attend to, process, and interpret information in a flexible and adaptive way. Focusing excessively on negative information while neglecting positive cues, holding negative beliefs about oneself, the world, and the future, fostering feelings of hopelessness and worthlessness (Beck, 1976). Dwelling on negative thoughts and experiences, leading to increased negativity (Nolen-Hoeksema, 2000).

Manipulation could be used by individuals with depression as a way to cope with feelings of helplessness or loneliness. They might manipulate situations to gain control or approval, which could temporarily alleviate depressive symptoms but ultimately reinforce negative patterns (Fiore & Exner, 2015). Manipulative behavior can be emotionally draining and lead to negative social consequences like isolation or relationship problems. These outcomes could contribute to or worsen depression (Baird et al., 2006). Research suggests a possible positive correlation between certain manipulative personality traits (e.g., narcissism) and depression (Miller et al., 2011). These traits can involve a sense of grandiosity, entitlement, and a lack of empathy, which can ultimately lead to social isolation and vulnerability to depression.

Egocentric individuals struggle to understand and consider the perspectives and feelings of others. This difficulty can hinder forming and maintaining healthy relationships (Planalp et al., 2017). Lack of social support is a well-established risk factor for depression (Cacioppo & Hawkley, 2005). Egocentricity can lead to frequent conflicts due to a lack of compromise and sensitivity to others' needs. These conflicts can contribute to feelings of isolation, anger, and frustration, potentially triggering or worsening depression (Twenge & Campbell, 2009). Despite appearing confident, egocentric individuals might be highly sensitive to criticism due to their inflated sense of self-importance. Negative feedback can challenge their self-perception and contribute to feelings of worthlessness, a core symptom of depression (Baumeister, 1998). Egocentric individuals often rely heavily on external sources of validation and approval. When these sources are unavailable or diminish, it can lead to feelings of emptiness, disappointment, and ultimately contribute to depression (Morf et al., 2017).

Table 4. Prior research has explored the relationship between psychopathy and depression within the broader examination of comorbidity between psychopathy and Axis I psychopathology. The results indicated that PCL-R scores, particularly those related to the interpersonal, affective, and lifestyle facets of the PCL-R, were negatively correlated with depression scores (Willemsen et al., 2011). Individuals with psychopathic traits are typically described as being resistant to experiencing depression and engaging in suicidal behaviors (Chabrol et al., 2010). Some propose that psychopathy could serve as a defense mechanism against underlying depression (Meloy, 2004), or that psychopathic traits may function as defenses against feelings of depression (Joseph, 1960). However, there remains a relatively limited understanding of how depression might intersect with psychopathy (Price et al., 2013). Studies generally report lower rates of depression diagnosis in individuals with high psychopathy scores (Clark et al., 2017). However, some research suggests psychopathy might be associated with specific symptoms of depression, like irritability or psychomotor agitation (Cooke & Forth, 2008). Psychopaths might be less vulnerable to depression due to their blunted emotional

responsiveness. They may not experience the same level of emotional distress that contributes to depression in others (Lynam & Gudjonsson, 2006). Psychopaths might minimize or even mask depressive symptoms. They may prioritize maintaining a positive self-image or manipulating situations for personal gain (Hare, 1991). Studies often report lower rates of depression diagnosis in individuals with high psychopathy scores (Harpur et al., 2014). However, some research suggests that psychopathic traits might be associated with specific symptoms of depression, such as irritability and psychomotor agitation (Cooke & Forth, 2008).

In a research endeavor investigating the links between psychopathy and its facets of fearless dominance and impulsive-antisociality with symptoms of posttraumatic stress disorder (PTSD), it was discovered that negative affectivity elucidated 76% of the common variance for PTSD, and in the case of impulsive-antisociality, it clarified 80% of the apparent negative correlation with PTSD (Sellbom, 2015). Core features of psychopathy, such as callousness, lack of empathy, and impulsivity, might make individuals with psychopathy less likely to experience the intense emotional distress and psychological symptoms characteristic of PTSD (Loyo-Vázquez et al., 2018). Psychopaths might also exhibit diminished fear conditioning, meaning they may not develop the same level of fear response to traumatic events compared to individuals without psychopathy (Patrick et al., 1994).

The link between psychopathy and depression might be weaker in females compared to males. Psychopathic traits like impulsivity and lack of empathy might buffer women from experiencing depression to the same extent as men. Women with PTSD may exhibit more internalizing symptoms like depression, while men may show externalizing symptoms like aggression (Ryczankowska et al., 2018).

Hormonal differences may influence vulnerability to mental health conditions. For instance, estrogen fluctuations across the menstrual cycle could contribute to depression in women (Kessler et al., 2017). Gender roles and social stressors can differentially impact mental health. Women may face greater pressures related to body image, childcare, and societal expectations, potentially contributing to depression risk (Kessler et al., 2017). Women are more likely to experience certain traumas, like sexual assault, which is a major risk factor for PTSD (Kilpatrick et al., 2013). Men are diagnosed with psychopathy at significantly higher rates than women (Fazel et al., 2018). Women are more likely to experience PTSD than men particularly after exposure to sexual violence (Kilpatrick et al., 2013). Women are diagnosed with depression at roughly twice the rate of men (Kessler et al., 2017).

Table 5. Lower SES is often associated with greater exposure to chronic stressors such as poverty, poor living conditions, and lack of access to resources. This increased stress exposure can heighten vulnerability to mental health problems like depression and PTSD (Evans & Kim, 2007). SES can interact with gender in

complex ways. In some cultures, with lower SES, traditional gender roles might be more rigid. For example, men might experience pressure to be the primary breadwinner, potentially leading to under-reporting of mental health issues, while women might face limited opportunities for emotional expression (Unger & Stien, 2004). Lower SES can significantly limit access to quality mental health services. This can exacerbate mental health problems for both men and women, though the impact might be more pronounced for one gender depending on cultural norms surrounding help-seeking behaviors (Hussain et al., 2014).

Men and women exhibit varying physiological and emotional responses to stress (Olson et al., 2020). Women typically show a stronger stress response involving heightened emotional reactivity, while men might exhibit a "fight-or-flight" response or externalizing symptoms (Kessler & Kendler, 2016). This difference can influence how individuals cope with traumatic experiences that might lead to PTSD. Societal expectations and gender roles can shape coping mechanisms. Men might be socialized to suppress emotions and engage in risk-taking behaviors, potentially leading to under-reporting of depression or externalizing it through aggression (American Psychological Association [APA], 2017). Women might be more likely to express emotions and seek social support, potentially influencing how they experience depression. Emerging research suggests gender differences in genetic and hormonal factors that may influence vulnerability to mental health conditions (McEwen & Casey, 2018). For example, estrogen has been linked to mood regulation, potentially impacting the development of depression in females.

Table 6. Depression can act as a mediator between gender and other mental health problems. Individuals with depression are at a higher risk for developing other mental health conditions due to shared risk factors (e.g., stress, negative thoughts) and impaired coping mechanisms.

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