



# PTSD Symptoms: Romantic Relationships with Individuals Who Have Narcissistic and Psychopathic Traits

## Citation

Arabi, Shahida. 2022. PTSD Symptoms: Romantic Relationships with Individuals Who Have Narcissistic and Psychopathic Traits. Master's thesis, Harvard University Division of Continuing Education.

## Permanent link

<https://nrs.harvard.edu/URN-3:HUL.INSTREPOS:37371611>

## Terms of Use

This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Other Posted Material, as set forth at <http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA>

## Share Your Story

The Harvard community has made this article openly available. Please share how this access benefits you. [Submit a story](#).

[Accessibility](#)

PTSD Symptoms: Romantic Relationships with Individuals Who Have Narcissistic and  
Psychopathic Traits

Shahida Arabi

A Thesis in the Field of Psychology  
for the Degree of Master of Liberal Arts in Extension Studies

Harvard University  
May 2022



## Abstract

Research has only begun to explore the mental health implications of being involved in romantic relationships with individuals who have narcissistic and psychopathic traits. Current research indicates that involvement in romantic relationships with individuals who have narcissistic or psychopathic traits may contribute to posttraumatic symptomology as well as other mental health difficulties. This study recruited 1,294 voluntary participants who self-reported being in these relationships to take a comprehensive survey measuring their partner personality traits and their own symptoms of post-traumatic stress disorder (PTSD) related to the relationship.

Instruments such as the PTSD Checklist for DSM-5, the Informant Five Factor Narcissism Inventory and the Modified Self-Report Psychopathy Scale were used to investigate the associations among PTSD, partner vulnerable narcissism, partner grandiose narcissism and partner psychopathy. The study also explored the impact of mediating and moderating variables such as the presence of various forms of abuse, underhanded manipulative tactics, and previous abuse history such as childhood abuse, to determine whether partner personality traits were still unique and significant predictors to PTSD symptoms related to the romantic relationship when these other variables were taken into account.

Multiple linear regressions revealed that both grandiose and vulnerable narcissism were significant and unique predictors of PTSD symptomology for those who had already left the romantic relationship, even when variables such as previous abuse, physical abuse

and abuse frequency were accounted for, and that grandiose narcissism was the largest predictor of posttraumatic symptomology. These partner traits were more predictive than abuse frequency, previous abuse, or physical abuse which were also significant. For individuals who were still in the romantic relationship with individuals with narcissistic or psychopathic traits, only psychopathy, abuse frequency and previous abuse remained significant predictors, with psychopathy and abuse frequency being the largest predictors. Furthermore, additional regression analyses exploring which facets of PTSD dimensions were most affected by these partner personality traits revealed that grandiose narcissism, vulnerable narcissism, and psychopathy were all significant predictors of PTSD intrusion and avoidance symptoms specifically, with grandiose and vulnerable narcissism being the strongest predictors of these dimensions of PTSD symptoms. For PTSD cognition and mood symptoms, grandiose narcissism was the strongest predictor, followed by vulnerable narcissism which was also significant. Psychopathy was not a significant predictor for PTSD changes in cognition and mood symptoms. For PTSD hyperarousal symptoms, all three predictors were significant but vulnerable narcissism showed the largest effect size, while grandiose narcissism had the smallest effect size for this facet of PTSD.

This study establishes an important and highly significant association between both grandiose and vulnerable forms of partner narcissism and PTSD symptomology, clarifies the association between partner psychopathy and PTSD symptomology, and offers further understanding regarding which PTSD diagnostic categories may be most closely associated with which partner personality traits.

## Dedication

This thesis is dedicated to my mother, Rehana, with loving gratitude for her hard work and resilience. It is also dedicated to all survivors and readers who have shared their stories with me over the years. You all have made it possible for me to do continue do this work with passion, devotion, and conviction - for that, I will be forever thankful.

## Acknowledgements

I am very grateful to and would like to give many thanks to my thesis director at Harvard, Dr. Fiery Cushman, for taking on this project and offering essential guidance, insight, encouragement, and resources that were invaluable to the shaping of this thesis at every stage of this process. I would also like to thank my research advisor, Dr. Dante Spetter, for offering valuable feedback and encouragement especially in the early stages of this project.

I would like to give special thanks to the amazing individuals who participated in the study for their time and commitment in contributing to this research. I am also grateful to researchers Dr. Courtney Humeny and Dr. Joshua Oltmanns for their generosity in sharing the instruments that would allow me to conduct this research, and for all other researchers who generously took the time to advise me. Additionally, I am grateful to all those who shared this study across their social media platforms, including Lisa A. Romano, Annie Kaszina, Kim Saeed, and Elizabeth McLaughlin.

Finally, I am grateful to professors and researchers at Harvard like Dr. Sarah Kleiman, Dr. Kelly Zuromski, Dr. Holly Parker, Dr. Ellsworth Fersch, Dr. Shelley Carson and Dr. Richard McNally whose courses helped me to develop a more comprehensive understanding of PTSD, mental health, narcissism, and psychopathy.

## Table of Contents

Dedication .....	v
Acknowledgements .....	vi
List of Tables .....	x
Chapter I Background .....	1
Intimate Partner Violence and Posttraumatic Symptoms .....	3
Violence and Narcissistic Personalities .....	11
Narcissism and Psychological Abuse .....	13
Psychopathy and Psychological Abuse .....	23
Psychopathy, Moral Transgressions and Sadism in Relationships .....	26
Psychological Manipulation: Gaslighting, Love Bombing and Stonewalling .....	30
Stonewalling .....	32
Jealousy Induction .....	33
Love Bombing .....	34
Malicious Envy .....	35
Aims and Hypotheses .....	36
Chapter II Method .....	38
Participants .....	38
Recruitment .....	38
Measures .....	39
PTSD Checklist for DSM-5 (PCL-5) .....	39



The Informant Five Factor Narcissism Inventory (IFFNI) Male and Female Versions.....	41
Modified Self-Report Psychopathy Scale-Short (MSRP-SF).....	42
Victimization Screening Survey, Modified .....	43
Procedure .....	44
Data Cleaning and Recoding Protocol.....	46
Chapter III Results .....	47
Sample Characteristics.....	47
PTSD, Partner Narcissism, Partner Psychopathy by Relationship Duration .....	53
PTSD Symptom Clusters, Partner Narcissism, and Partner Psychopathy .	57
Correlations Between PTSD Symptom Clusters, Partner Narcissism and Partner Psychopathy.....	57
Regressions for PTSD Symptom Clusters, Partner Narcissism and Partner Psychopathy .....	58
Examining Gender Specific Effects.....	59
Correlations for Partner Traits and Love Bombing, Jealousy Induction, Gaslighting, and Stonewalling.....	61
Chapter IV Discussion .....	67
Grandiose Narcissism, Vulnerable Narcissism and PTSD for Individuals Who Left the Relationship.....	68
Love Bombing and Jealousy Induction for Individuals Who Left the Relationship .....	70

Psychopathy and PTSD in Individuals Still in the Relationship.....	71
Gender Differences, Partner Traits and PTSD.....	74
PTSD Symptom Clusters, Narcissism and Psychopathy .....	75
Regressions for PTSD Symptom Clusters, Narcissism and Psychopathy .....	76
Limitations and future directions .....	79
References.....	83

## List of Tables

Table 1. Descriptive Statistics.....	49
Table 2. Correlations Between PTSD, Partner Narcissism, and Partner Psychopathy.....	50
Table 3. PTSD Regressed on Vulnerable and Grandiose Narcissism .....	50
Table 4. PTSD Regressed on Narcissism, Psychopathy, and Experiences of Abuse by Relationship Status.....	52
Table 5. Correlations Among PTSD Dimensions, Partner Narcissism and Partner Psychopathy .....	55
Table 6. PTSD Intrusion/Reexperiencing Regressed on Narcissism and Psychopathy.....	55
Table 7. PTSD Avoidance Regressed on Narcissism and Psychopathy .....	56
Table 8. PTSD Cognition and Mood Regressed on Narcissism and Psychopathy .....	56
Table 9. PTSD Hyperarousal Regressed on Narcissism and Psychopathy.....	56
Table 10. PTSD Regressed on Narcissism and Psychopathy with Gender Effects .....	60
Table 11. Correlations for love bombing, gaslighting, stonewalling, jealousy induction and partner traits .....	62

## Chapter I

### Background

While there has been substantial research on narcissism and psychopathy, less is known about individuals in romantic relationships with those who possess narcissistic and psychopathic traits and behaviors. Narcissist and psychopath have become popular buzzwords used to describe emotionally manipulative and abusive individuals, yet the effects of the specific types of manipulation and abuse they use within the context of intimate relationships have only begun to be explored in the literature. Narcissistic individuals often lack empathy, demonstrate an excessive sense of entitlement, are envious of others' abilities and accomplishments and are prone to exploiting others, creating a severe sense of burden on their partners and loved ones (American Psychiatric Association, 2013).

There are numerous common traits underlying narcissism and psychopathy that are relevant to consider when it comes to aggressive behaviors in intimate relationships, such as a lack of empathy, grandiosity, callousness, manipulation, interpersonal difficulties, and exploitation of others (American Psychiatric Association, 2013; Hare, 2005; Lamkin et al., 2017; Wai & Tiliopoulos, 2012). Individuals with narcissistic and psychopathic traits engage in manipulative and aggressive behaviors such as jealousy induction (Massar 2017; Hart & Tortoriello, 2017), infidelity and game-playing (Campbell et al., 2002; Adams, et al., 2014), conflict-ridden communication styles, verbal abuse and gaslighting (Miano, 2021; Green & Charles, 2019; Caiozzo et al., 2016), the perpetration of intimate partner

violence and other forms of aggression (Gewirtz-Meydan & Finzi-Dottan, 2018; Fernández-Suárez et al., 2018; Humeny et al., 2021; Regan & Durvasula, 2016; Blinkhorn et al., 2017), malicious envy (Lange et al., 2018), excessive attention and flattery in the beginning of the relationship known as love bombing (Strutzenberg et al., 2017), stonewalling (Horan et al., 2015), and to some extent even sadism and unprovoked aggression (Woodworth, & Porter, 2002, Reidy et al., 2011; Kjærviik, S. L., & Bushman, 2021).

While NPD and ASPD are considered distinct disorders, they also share overlapping characteristics as well as similar neurological characteristics like differences in areas of the brain related to empathy such as the amygdala and prefrontal cortex as well as reward-related information in the striatum (e.g. Feng, et al., 2018; Schulze et al., 2013, Glenn et al., 2009; Glenn et al., 2010). In people with these characteristics, this seems to contribute to their commonly shared resistance to treatment and the inability or unwillingness to change more ingrained harmful or dysfunctional behaviors, especially in their intimate relationships (Vitale & Newman, 2013). This inability to change could cause further trauma in their victims.

In a recent study by Humeny and colleagues (2021), 475 individuals who identified as being in a relationship with an abuser with psychopathic traits were surveyed to evaluate whether psychopathic traits predicted domestic violence. The study found that a higher level of psychopathic traits was associated with domestic abuse that was more versatile, physically harmful and more frequent. While it is established that psychopathy is associated with aggression and sadism, in a meta-analysis of 437 studies, Kjærviik and Bushman (2021) revealed that narcissism was also related to both aggression

and violence. This aggression took many forms, including indirect, direct, displaced, verbal and bullying aggression as well as both reactive and proactive aggression. While this association was stronger under conditions of provocation, it still remained significant even in the absence of provocation across multiple studies. This is important to consider, because unprovoked aggression can harm those in intimate relationships with individuals who have narcissistic traits as well as psychopathic traits. Recent research also indicates that individuals in relationships with narcissistic individuals endure a greater psychological burden and suffer from more mental health difficulties in the aftermath of such a relationship, even more than those in relationships with people with other psychiatric or personality disorders such as Borderline Personality Disorder (Day et al., 2019).

### **Intimate Partner Violence and Posttraumatic Symptoms**

Previous studies have shown a strong association between being the perpetrator of intimate partner violence and narcissistic as well as antisocial personality traits (Fernández-Suárez et al., 2018; White & Widom, 2003; White et al., 2008; Ryan, Weikel, & Sprechini, 2008; Swogger, Walsh, & Kosson, 2007). Intimate partner violence is significantly associated with a number of adverse effects, including depression, posttraumatic stress disorder, anxiety, and suicide (Lagdon et al., 2014; Brignone et al., 2018; Brown & Seals, 2019).

Given this association between intimate partner violence and PTSD (e.g. Lagdon et al., 2014; Beck et al. 2011), further research is needed to establish whether or not those in relationships with those perceived to be high in narcissistic or psychopathic characteristics are more likely to exhibit posttraumatic symptomology such as intrusive

thoughts, nightmares, hypervigilance, and avoidance. Much of the literature on intimate partner violence focuses on physical violence, and more blatant control and threat tactics rather than the many facets of emotional abuse and aggression that individuals with narcissistic and psychopathic traits enact in intimate relationships (Diez et al., 2017). This literature also tends to primarily explore the personality characteristics and trauma histories of victims rather than perpetrators (e.g. Pereira et al., 2020; Widom et al., 2008; Mouzos & Makkai, 2004). PTSD has long been associated with combat or physical violence due to its association with physical injury, but trauma therapists note that prolonged emotional abuse and psychological abuse can also lead to PTSD symptoms (Walker, 2013; Herman, 1992). Since only a certain percentage of those who experience intimate partner violence develop PTSD, it may be that experiencing the specific manipulative communicative styles and lack of empathy or remorse present in narcissistic and psychopathic individuals could serve as additional risk factors for the development of PTSD.

Though research suggests that there are other risk factors for developing PTSD such as the presence of childhood abuse and multiple forms of abuse experienced (e.g. Ford, 2021), there has been far less research conducted to explore whether being intimately involved with a personality disordered person might contribute specifically as a risk factor or predictor for posttraumatic symptomology. Empirical research examining the unique contributions of partner traits apart from emotional and psychological abuse tactics or previous abuse history is also lacking. There are few studies investigating the link between PTSD and partner trait narcissism, or to what extent psychopathy still predicts PTSD when trait narcissism is also included. It is also important to consider that

individuals who get into relationships with individuals who have narcissistic or psychopathic traits may already be predisposed to posttraumatic symptomology through a phenomenon known as revictimization, where an individual who has experienced childhood trauma is revictimized by abusive relationships in adulthood (Pereira et al., 2020; Widom et al., 2008; Mouzos & Makkai, 2004). Past studies have not sufficiently accounted for this variable when exploring the association between PTSD and partner traits, nor is it clear whether it is the presence of physical abuse that produces PTSD symptomology or if these partner traits can significantly contribute regardless of the presence of physical abuse or other manipulative tactics associated with these partner traits. This study sought to clarify this relationship between partner traits and PTSD by taking into account previous abuse by past partners and childhood abuse, to better identify whether partner traits were still unique predictors of PTSD even when a history of previous abuse, the presence of physical abuse and other manipulative behaviors were included.

Post-traumatic stress disorder is a disorder characterized by maladaptive changes in cognition, memories, arousal, reactivity, and interpersonal functioning following the exposure to a traumatic event involving actual or threatened death, serious injury, or sexual violence (APA, 2013). It has a lifetime prevalence of 4% globally and a lifetime prevalence of 8% in the United States (Kilpatrick et al. 2013; Koenen, et al., 2017). Individuals can experience posttraumatic symptomology by directly experiencing the event, witnessing the event happen to others, from learning that the traumatic event (which has to be violent or accidental) occurred to a family member or friend, or experiencing repeated exposure to aversive details of the traumatic event (e.g. the case of



first responders or police officers exposed to details of violent crimes). According to the DSM-V, PTSD includes four main categories of symptom clusters, including intrusion symptoms (e.g. intrusive thoughts or memories of the trauma), avoidance symptoms (e.g. avoiding places or activities that remind you of the trauma), negative alterations in cognition and mood (e.g. an inability to enjoy things you loved), and alterations in arousal and reactivity (e.g. hyperarousal, irritability, recklessness).

Since trauma exposure is necessary for diagnosis of PTSD and this trauma exposure is restricted to physical and sexual violence, more research is needed to identify whether those who suffer more psychological forms of abuse within the realm of Intimate Partner Violence may also experience PTSD symptoms. Walker (1984) posited that the psychological symptoms experienced by those who endured Intimate Partner Violence overlapped significantly with the diagnostic criteria for PTSD. Yet the diagnostic criteria for PTSD was designed to address singular trauma, not necessarily the chronic victimization involved in ongoing physical or psychological abuse or more complex forms of trauma, so further studies need to explore whether this type of victimization may be correlated with PTSD symptoms (Ford et al., 2020). In addition, victims of IPV may experience “subthreshold” PTSD symptoms that do not meet the entire criteria for PTSD but are impactful nonetheless, as well as symptoms of depression and anxiety apart from the PTSD diagnosis. They may also suffer from what researchers call trauma bonding or traumatic entrapment, a bond that develops between abuser and victim due to the presence of danger, betrayal and a power imbalance (Reid et al., 2013; Carnes, 2019; Cantor & Price, 2007). Due to a need to survive the abusive environment, the victim engages in behaviors to appease the abuser in an attempt to avoid further violence, and

this appeasement is theorized to stem from emotions that are a part of PTSD symptomology such as shame and fear (Cantor & Price, 2007).

Some studies have shown strong positive correlations between every type of intimate partner violence (physical, psychological, sexual) and PTSD, with psychological abuse being the strongest predictor of posttraumatic stress disorder; psychological abuse and emotional abuse also often go hand in hand in Intimate Partner Violence (Mechanic et al., 2008; Pico-Alfonso, 2005, Follingstad et al., 2005; Arias & Pape, 1999; Dutton et al., 1999). A study of 413 battered women by Mechanic and colleagues (2008) controlled for the effects of physical violence, injuries and sexual coercion and used a clinician interview with scales such as The Posttraumatic Diagnostic Scale (PDS) and The Standardized Battering Interview to assess IPV and PTSD symptoms to identify the unique effects of psychological abuse and stalking. This study found that psychological abuse and stalking contributed uniquely to PTSD and depression symptoms (Mechanic et al., 2008). This study builds on previous foundational research which confirms the strong relationship between psychological abuse and PTSD, such as a study by Arias and Pape (1999) which showed that psychological abuse contributed significant unique variance to posttraumatic stress disorder symptoms in battered women, despite controlling for physical violence, as well as a study by Dutton and colleagues (1999) which also showed that trauma-induced symptoms resulting from abuse were mainly predicted by psychological abuse, not physical violence. Furthermore, Taft and colleagues (2005) also found that the relationship between psychological abuse and PTSD was also more consistent than the relationship between physical violence and PTSD.

In another study showing the importance of psychological abuse, a sample of 75 women abused by their partner compared to 52 non-abused controls showed that women who had experienced Intimate Partner Violence had higher rates of PTSD symptomology in comparison to non-abused control women. The severity of Intimate Partner Violence was also significantly associated with the intensity of posttraumatic symptoms and psychological abuse remained the strongest significant predictor of posttraumatic stress disorder (Pico-Alfonso, 2005). Interestingly, childhood abuse variables didn't account for PTSD score variance, which suggests that psychological abuse on its own by an intimate partner in adulthood could potentially lead to PTSD regardless of childhood abuse history. Basile and colleagues (2004) assessed a sample of 380 women who reported any kind of physical, sexual, psychological or stalking violence in their current relationship for PTSD symptoms using the Impact of Event Scale, as well as scales assessing for power and control tactics to measure psychological violence. Results showed that all four forms of violence were significantly associated with PTSD symptoms.

The type of abuse experienced can also contribute to the prognosis of PTSD symptoms. In another longitudinal study, Blasco-Ros and colleagues (2010) explored PTSD symptoms in a sample of 91 women. Results showed that those who experienced only psychological abuse (as opposed to both physical and psychological abuse) were less likely to recover and did not show improvement in depressive, anxiety and PTSD symptoms. Multiple regression analyses revealed that it was likely that those who only experienced the physical component of abuse were more likely to escape from the abusive situation as it was more "apparent" that they were being abused. On the other

hand, victims exposed to only psychological abuse likely need more help to exit the relationship and to recognize that they are being abused.

These studies have important implications for studying what is known colloquially as “narcissistic” or “psychopathic” abuse, because recipients of psychological violence are more likely to experience PTSD and other mental health symptoms partially due to the longer duration of the relationship and the continued exposure to trauma. In another study, high levels of both emotional and verbal abuse, as well as the experience of dominance and isolation, interacted with high levels of shame associated with PTSD for sixty-three women who had undergone Intimate Partner Violence (Beck et al., 2011). However, while recent empirical evidence suggests that individuals who undergo IPV are more susceptible to PTSD and that the effects of emotional and verbal abuse are strongly associated with PTSD symptoms, these studies primarily focus on the women who were targeted and do not account for the personality traits or potential disorders of the perpetrator.

The effects of intimate partner violence on an individual’s well-being and whether they lead to life-threatening posttraumatic changes are important to explore. According to some longitudinal research, a history of intimate partner violence is a significant risk factor for suicide attempts among women specifically, with some studies indicating that emotional abuse elevates that risk by presenting increased mental health difficulties (e.g. Naved et al., 2008). IPV is also associated with severe traumatic stress which may lead to subsequent suicide attempts and PTSD related changes in the brain (Devries et al., 2013; Bremner et al., 2003). In one sample study of 406 abused women, more than half of the sample reported experiencing significant posttraumatic symptoms 1 year later and met

criteria for intrusion, avoidance, and arousal symptom clusters (Dutton et al., 2004).

Reliving the event through flashbacks, as well as increased agitation and sleep problems, even after the relationship has ended, could contribute to heightened risk, as extreme agitation and increased irritability have been shown by research to be warning signs for suicide attempt (Busch et al., 2003; Rudd et al., 2006).

Neurobiological factors may also play a role in the ways in which intimate partner violence confers risk for traumatic symptoms, as studies show a link between the hypothalamus-pituitary-adrenal (HPA) axis dysfunction, trauma and abuse as these are emotional stressors that lead to dysfunction in the HPA axis, which plays a key role in our stress response and returning the body back to homeostasis. Studies show that prolonged stress can result in HPA axis dysfunction, and empirical evidence shows an association between stressors such as intimate partner violence and dysregulation of the HPA axis (Crofford, 2007; Bremner et al., 2003; Pinto, et al., 2016; Seedat, 2003; Inslicht et al., 2006). Other research also documents the correlation between intimate partner violence and mental health difficulties, including a systematic review of fifty-eight papers which suggest that intimate partner violence has significant associations with depression, posttraumatic stress disorder, and anxiety (Lagdon et al., 2014).

It is thus predicted that in this study, there will be a high correlation between experiencing a relationship with individuals with high narcissistic and psychopathic scores and higher PTSD symptom scores given the risk for psychological abuse, physical abuse and aggression which is linked to narcissistic and psychopathic personality types.

## **Intimate Partner Violence and Narcissistic Personalities**

Despite research showing a clear link between intimate partner violence and posttraumatic symptomology, less research has been conducted on how the abuser's characteristics can exacerbate the severity of PTSD symptoms among individuals who are abused by those with narcissistic and psychopathic traits. Research suggests a strong link between narcissistic and antisocial traits and the perpetration of intimate partner violence, but the impact on victims is less clear (e.g. Craig, 2003; Regan & Durvasula, 2016; Yang & Mulvey, 2012). Narcissistic traits appear to have an impact on both male and female romantic partners in the realm of intimate partner violence. Researchers Simmons and colleagues (2006) used the Millon Clinical Multiaxial Inventory-III (MCMI-III) to assess personality profiles of individuals referred to domestic violence diversion programs and found that female offenders specifically were more likely to demonstrate narcissistic personality traits. Similarly, Meier (2005) compared 54 male perpetrators of intimate partner violence with 64 male non-perpetrators and showed higher scores on the Hypersensitive Narcissism Scale for perpetrators, a scale that measures aspects of more "vulnerable" anxious narcissism. Gerwitz-Meydan and Finzi-Dottan (2017) further investigated 128 heterosexual couples in long-term relationships in a study that showed an association between levels of narcissism and psychological aggression for both men and women. They found that higher levels of narcissism predicted higher perpetration of psychological aggression for both men and women which was also linked to lower relationship satisfaction for their partners.

The impacts of victimization are relevant to consider especially in the context of treatment. Research shows that those romantically involved with individuals with

narcissistic or psychopathic traits may feel further invalidated in therapeutic settings that emphasize the codependent traits of victims rather than provide knowledge regarding the antisocial or psychopathic traits of perpetrators. For example, Leedom and colleagues (2019) conducted a study of 104 intimate partner abuse survivors, many of whom identified as having been involved with individuals with narcissistic and psychopathic traits. These survivors reported that clinicians who offered insight on partner characteristics (e.g. “While documenting my daily ‘norm’ and existence with my abuser . . . she would explain that this was typical and classic behavior of anti-social personality disorder and my being victimized was not my fault”) rather than a lack of knowledge about perpetrator traits, or an emphasis on codependent traits or blame for the abuse (e.g. “She did not grasp the pathology I was dealing with,” “She was unaware of the concept of a psychopath in a relationship and how harmful that can be”) felt most effectively assisted with their trauma.

To aid in future treatment for victims in these types of relationships, further research is needed in order to assess how more psychological forms of violence, especially violence enacted by partners with narcissistic or antisocial and psychopathic personalities, may affect an individual in an intimate relationship. Miller, Campbell, and Pilkonis (2007) indicate that one of the unique and defining characteristics of those with Narcissistic Personality Disorder in the clinical population is that, narcissistic personality disorder was most closely associated with causing pain and suffering to others (p. 170). In Day and colleagues’ (2019) study, 683 participants comprising of romantic partners, mothers, or other family members in a close relationship with a pathological narcissist reported their levels of grief, burden, mental health and coping style using the

Pathological Narcissism Inventory (Carer Version) (SB-PNI-CV). Participants' reported burden was 1.5 standard deviations higher than the burden found for people in relationships with individuals who had mood, neurotic, or psychotic disorders, or caregivers of people with Borderline Personality Disorder. Individuals in relationships with pathological narcissists also reported greater levels of depression and anxiety, as well as maladaptive coping methods. This study is groundbreaking in its ability to establish that those who are in intimate relationships or caretaking relationships with pathological narcissists experience a psychological burden that is even more detrimental than in relationships with individuals with other disorders. Given the increased psychological burden associated with being in a narcissistically abusive relationship, it is possible PTSD symptoms will be observed in people in these relationships and more research is needed to support this.

### **Narcissism and Psychological Abuse**

In the DSM-V, Narcissistic Personality Disorder is a personality disorder associated with a chronic lack of empathy and a pervasive pattern of grandiosity, attention-seeking, a constant need for admiration as well as an excessive sense of entitlement and penchant for interpersonal exploitation (American Psychiatric Association, 2013). This disorder is characterized by impairments in the ability for intimacy, causing significant issues in interpersonal relationships. While NPD is considered to be a full-fledged personality disorder with long-standing dysfunctional and harmful forms of behavior, the traits of narcissism or subclinical narcissism can exist on a spectrum and can manifest in healthy ways (e.g. positive self-love) or unhealthy ways (e.g. entitlement and exploitation of others) depending on the severity of the traits and the



ways they are employed in interpersonal relationships by the individual (Krizan & Herlache, 2018). Researchers posit that the further an individual is on the spectrum of narcissism, the more likely they engage in harmful behaviors such as the manipulation or exploitation of others.

While many disorders cause mostly internal subjective distress, narcissism has a strong association with causing distress to others. Miller (2007) sampled 152 individuals who were receiving psychiatric treatment and a second sample of 151 individuals from the community who were assessed using the clinical criteria for the disorder, with the aim of seeing whether NPD meets criterion C of personality disorders, which requires symptoms that lead to significant distress or impairment in functioning. This study showed that Narcissistic Personality Disorder was most strongly related to causing pain and suffering to others, a relationship that stayed significant even when other Cluster B personality disorders (e.g. Borderline Personality Disorder) were controlled. Much of the writing about narcissism theorizes that people with NPD lash out when there is a threat to their ego. However, Randall and Colvin (2014) showed that narcissistic individuals degrade others more than non-narcissistic individuals even when a threat to their ego is absent. This has implications for what is known as “narcissistic rage,” excessive rage that results from a perceived slight and narcissistic hypersensitivity (Krizan & Johar, 2015). It suggests that individuals in romantic relationships with narcissists may bear the brunt of unwarranted, unprovoked aggression as well as ego-threatened aggression (Hart & Tortoriello, 2017).

This narcissistic rage can present itself as hostility in intimate relationships. In another study by Lamkin and Shaffer (2011), a sample of 54 heterosexual couples were

video recorded while engaging in observational communication tasks. They later completed self-report questionnaires using the 40-item Narcissism Personality Inventory as well as questions about relationship satisfaction. Trained observers rated interactions during the communication tasks on Likert scales assessing positive affect, anger, and hostility. Both men and women with higher levels of narcissism demonstrated higher levels of hostility, and male partners of women with higher narcissistic traits displayed more anger suggesting that interacting with someone who is behaving in a narcissistic way is enraging, contributing to the narcissistic person's capacity for gaslighting: attributing the out of control or "crazy" behavior to their target when it is actually they and not the partner who is behaving badly. Narcissism was not associated with positive affect. This study provides further evidence that narcissistic traits are associated with hostility in romantic relationships.

In another study, Caiozzo and colleagues (2016) recruited 1180 college students to complete measures assessing attitudes about aggression in romantic relationships, personality and emotion regulation using scales such as the Conflict in Adolescent Dating Relationships Inventory, Inventory of Callous Unemotional Traits, and Narcissistic Personality Inventory. The researchers discovered that while physical aggression was predicted by aggressive attitudes and callous-unemotional traits (associated with more psychopathic traits) in males, verbal aggression was predicted by narcissism in females.

Narcissists show their aggression in relationships, but they are also more likely to espouse violence and attitudes supporting violence in general. In a study of 329 participants at a University in North-West England by Blinkhorn and colleagues (2016), narcissism was measured using the 40-item Narcissistic Personality Inventory (NPI) and

attitudes toward violence were assessed using the 39-item Velicer Attitudes Towards Violence Scale (VATVS). Results revealed that narcissists showed more accepting attitudes toward violence. This study highlights that not only are narcissists frequent perpetrators of domestic violence as shown by other research, but that they have more overall accepting attitudes toward violence in general, which could contribute to their resistance to treatment and interpersonal difficulties as they deem their own violent behavior appropriate and acceptable. In addition, those with Dark Triad traits (which include both narcissism and psychopathy) tend to use more cognitive forms of empathy to manipulate others, without regard to the harm they pose.

Research by Wai and Tiliopoulos (2012) revealed that those with dark triad personalities had deficits in affective empathy – the ability and willingness to feel what another person is emotionally experiencing – but that narcissists specifically had very few deficits in cognitive empathy, the ability to intellectually assess and predict what people might be feeling and thinking. Using a sample of 139 university students, individuals self-reported on scales such as the Narcissistic Personality Inventory, the Levenson self-report psychopathy scale, and Empathy Quotient to assess their levels of dark triad traits, as well as a measure of affective empathy using reactions to pictures of facial expressions. As the researchers noted, individuals who had a high level of dark triad traits used a more cognitive form of empathy to analyze the emotions of others and used this information to create strategies for achieving their own goals. This form of cognitive empathy combined with their lack of affective empathy allowed them to overlook any potential harm committed to others in the pursuit of personal gain.

Studies note that individuals with narcissistic traits can initially be very attractive potential mates before individuals get to know well, such as during a long-term intimate relationship (e.g. Dufner et al., 2012). Back and colleagues (2010) conducted three studies using 2,628 dyads. In the first study, a group of 73 college freshmen evaluated each other with a popularity questionnaire (e.g. “How likeable do you find this person? “Would you like to get to know this person?”) after self-introductions in round-robin style fashion. These introductions were videotaped and also assessed for physical cues, nonverbal body cues, nonverbal facial cues, and verbal cues by the researchers as well as participants in the second study who did not meet individuals in person. Later, these same students filled out the Narcissistic Personality Inventory to assess for narcissistic traits. Narcissism was associated with what the researchers called “popularity at first sight” and was associated with more “attractive” and flashy visual cues as well as facial expressions. However, this good first impression can be short-lived as other research shows that narcissistic individuals are later rated as disagreeable as people become more well acquainted with them. For example, Paulhus (1998) conducted a study that showed how narcissistic behavior can evolve over time. He assessed self-ratings and peer-ratings of twenty-four groups of individuals who had weekly meetings for 7 consecutive weeks. The individuals with higher levels of narcissism in this group were rated as being more agreeable, open and conscientiousness after the first meeting. However, several weeks later, they were rated as being disagreeable and lower on measures of conscientiousness and emotional stability and perceived to be more hostile and defensive.

In addition, Bryne and O’Brien (2014) also studied 147 undergraduates who were asked to rate a target they knew who was most similar to a narcissistic prototype, an

authentic self-esteem prototype, and a control person. Participants who rated narcissistic targets reported more interpersonal problems with the target and more avoidant and revenge behaviors directed toward them by the target than when rating authentic targets who matched a prototype for high self-esteem or control targets. This shows that those who interact with those high in narcissistic traits perceive them to be more interpersonally difficult to deal with and are more likely to be targeted with vengeful behaviors when dealing with narcissistic individuals.

Some studies in neuroscience support the idea that those with narcissistic traits tend to have more neurological deficiencies in empathy which could contribute to their repeatedly callous and aggressive behavior in relationships. Generally, Narcissistic Personality Disorder has been shown by fMRI studies to be connected to deficits and gray matter abnormalities in brain areas related to empathy such as the left anterior insula as well as dorsolateral and medial parts of the prefrontal cortex, regions of the brain which are associated with empathy, working memory, decision making and inhibiting inappropriate emotional responses (Schulze et al., 2013). Other fMRI research has shown that self-reported male narcissists specifically demonstrate a hypersensitivity in what neuroscientists call the “social pain network” such as the anterior insula, dorsal anterior cingulate, and subgenual anterior cingulate cortex (areas of the brain associated with self-referential processing) during incidents of social exclusion, which has been theorized by researchers to contribute to their heightened sensitivity to criticism and perceived slights, causing interpersonal relationships with narcissists to be difficult and conflict-ridden (Jauk et al., 2017; Cascio et al., 2015). Female narcissists too may engage in retaliatory aggression in response to perceived social rejection. For example, a study conducted by

Chester and colleagues (2016) explored retaliatory aggression in narcissists - aggression in response to perceived slights and interpersonal insults. This fMRI study was conducted on 15 females and showed that female narcissists displayed greater dorsal anterior cingulate cortex activation during social rejection and behaved aggressively toward one of the rejecters by blasting them with an unpleasant noise when given the option.

A narcissist's hostile response to perceived social rejection may have to do with their inability to self-validate (independently affirm their own sense of self-worth) and their search for external validation, which can lead to numerous interpersonal difficulties and even narcissistic hostility in intimate relationships. Interestingly, narcissists have been shown to have disruptions in their functional and structural connectivity between the medial prefrontal cortex (which is involved in self-representation) and the striatum, associated with reward (Chester et al., 2016). This frontostriatal pathway has been shown by previous research to have lower structural integrity in narcissists overall in comparison to non-narcissistic individuals, indicating that both male and female narcissists may attempt to secure external admiration and affirmation in part due to a deficit in these neural pathways, as greater functional and structural connectivity between the ventral striatum and the medial prefrontal cortex has been associated with self-esteem (Chester et al., 2016).

These findings align with other studies which provide evidence for the association between the perpetration of abuse, manipulation and narcissistic traits. It appears that individuals with narcissistic traits may search for validation outside of their primary intimate relationships, causing psychological harm to their significant others. Researchers Campbell, Foster and Finkel (2002) conducted five studies with romantically involved

university students which showed that narcissism was associated with “game-playing” in relationships according to both self-reports by narcissistic individuals (as measured by the Narcissistic Personality Inventory) as well as confirmation by their partners in past and current relationships. Campbell and colleagues (2002) conducted five studies to investigate associations among narcissism, self-esteem and love using measures such as the Narcissistic Personality Inventory and the 41-item Love Attitudes Scale with a subscale measuring a particular love style (e.g. a “ludus” love style includes an item like, “I enjoy playing the game of love with a number of different partners”). Results revealed that narcissism was associated with a game-playing love style (particularly a significant correlation with the “ludus” love style), and analyses examining mediating variables showed that this love style was driven by a need for power and autonomy and was also linked with greater relationship alternatives and less commitment. These self-reports by narcissists were further confirmed by partners in past relationships with individuals who had narcissistic traits who were asked to write narratives about relationships with a narcissistic individual and a non-narcissistic individual. These narratives showed that partners with narcissistic traits were described as “game players” and unfaithful in their relationships, as well as openly flirtatious with others outside of the relationship; partners with narcissistic traits were also described as more controlling, deceptive, and manipulative. The fifth study the researchers conducted consisted of studying 59 dating couples and confirmed that self-reported narcissistic traits and behaviors correlated with partner ratings.

As the researchers conclude, narcissists look to relationships as a source of power or control rather than a platform for experiencing and expressing commitment (Campbell

et al., 2002). Such studies establish that narcissistic individuals are prone to game-playing and infidelity in romantic relationships and establish that this type of manipulation is associated with narcissistic traits. This game-playing consisted of searching for power and autonomy and was associated with less commitment and more alternative partners to their primary relationships. This could prove to be a stressor in their intimate relationships, since infidelity can contribute to posttraumatic symptoms (e.g. Roos et al., 2019).

### **Grandiose and Vulnerable Narcissism**

More recently, researchers studying narcissism have identified two distinct subtypes: grandiose narcissism and vulnerable narcissism, with some researchers positing that both aspects of narcissism exist on a narcissism spectrum and an individual can possess both (Krizan & Herlache, 2018; Ponti, et al. 2019). Those higher in the traits of grandiose narcissism tend to have an inflated sense of self-importance, higher self-esteem, social fearlessness, confidence and suffer less internal distress whereas those higher in vulnerable narcissistic traits tend to be shyer, neurotic, fearful and avoidance-oriented, although both subtypes exhibit interpersonal difficulties (Rohmann et al., 2011; Jauk, et al., 2022; Papageorgiou et al., 2019). It is important to note that much of the research on the link between domestic violence and narcissism focuses on the grandiose subtype of narcissism and a large majority of these studies also include samples consisting of university students. Further research is needed to understand the impact of narcissistic personalities in relationships among the general population and differences in the ways vulnerable narcissism and grandiose narcissism affect an intimate partner's well-being.



Research shows that those who have grandiose narcissistic traits are less susceptible to stress or depression (Papageorgiou et al., 2019). Papageorgiou and colleagues (2019) conducted a study of 744 individuals which assessed whether subclinical narcissism may increase mental toughness, predicting lower perceived stress. They used scales such as the Short Dark Triad scale (SD3) which assesses subclinical narcissism, psychopathy and Machiavellianism, as well as the Five Factor Narcissism Inventory (FFNI), a 148 item self-report inventory designed to assess narcissism from the 5-factor model and allows discrimination between vulnerable and grandiose subtypes. Results showed that as grandiose subclinical narcissism increased, perceived stress decreased, whereas vulnerable subclinical narcissism had the opposite effect on perceived stress. People with narcissistic personalities with more grandiose features could have an additional advantage when manipulating their intimate partners, because they are less prone to experiencing distress themselves and can be superficially charming and seductive as short-term mates; they may lash out with more callous hostility and aggression in intimate relationships when their grandiose self-perception is threatened and when they perceive others to be insulting and criticizing them (Moeller et al., 2009). Given this, it's possible that the traits of grandiose narcissism could cause a higher degree of PTSD symptoms in partners of narcissistic partners than the traits of vulnerable narcissism. More research would need to be conducted to investigate how grandiose narcissism and vulnerable narcissism differ in their impact on romantic relationships and posttraumatic symptomology.

## **Psychopathy and Intimate Partner Violence**

Psychopathy is a disorder referenced in the diagnostic criteria for Antisocial Personality Disorder associated with numerous deficits in empathy, conscience, moral decision-making, and impulsivity. Antisocial Personality Disorder is a personality disorder associated with a pervasive pattern of disregard for and violation of the rights of others; it can include traits such as failure to conform to social norms in terms of lawful behavior, deceitfulness, impulsivity, irritability and aggressiveness, and lack of remorse, with these behaviors occurring since age 15 (APA, 2013). According to the DSM-5, this pattern has also been referred to as “psychopathy” or “sociopathy.”

Much like narcissism, psychopathy is associated with a lack of empathy and aggression in intimate relationships. For example, a systematic review of 41 empirical quantitative studies revealed that psychopathy was a strong predictor of male to female intimate partner violence perpetration among both convicted as well as non-convicted men (Suárez et al. 2018). Robert Hare’s Psychopathy Checklist-Revised (PCL-R) identifies individuals who lack remorse, tend to be superficially charming and glib, are prone to engaging in pathological lying, require a great deal of stimulation, and lead overly dependent lifestyles where they con and manipulate others for resources. In Hare and Neumann’s (2005) four-factor model of psychopathy, psychopathy is further broken down into four primary dimensions – interpersonal (glib/superficial charm, grandiose sense of self-worth, pathological lying), affective (lack of remorse or guilt, shallow affect, callous/lack of empathy, failure to take responsibility for actions), lifestyle (need for stimulation/proneness to boredom, impulsivity, irresponsibility, promiscuous sexual behavior, parasitic lifestyle, lack of realistic goals), and antisocial (impaired behavioral

controls, early behavior problems, juvenile delinquency, revocation of conditional release, criminal versatility). Two of these factors, the interpersonal and affective, are particularly important to consider when it comes to the interpersonal exploitation and aggression of the psychopath in intimate relationships, and it is these two factors that also distinguish the psychopath from those with Antisocial Personality Disorder.

Psychopathy, while referenced in the diagnostic criteria for Antisocial Personality Disorder, is a subtype of ASPD which includes callous-unemotional traits in addition to behaviors such as criminality and violation of laws. While some literature explicitly addresses psychopathy, other research focuses primarily on Antisocial Personality Disorder or includes a mixed sample of both. There is some overlap in the behaviors of these disorders, since both psychopaths and those with ASPD display a pattern of disregarding the rights of others and manipulating others for their own gain, so research that addresses either disorder can still be helpful in better understanding psychopathic behaviors, although there are limitations and subtle differences. Psychopaths, as mentioned previously, possess not only antisocial behaviors but also the ingrained interpersonal and affective features and personality traits such as callous-unemotional traits which can make them more resistant to treatment.

Those with psychopathic traits tend to be interpersonally exploitative, even violent, while others engage in con artistry in their most intimate relationships, as they are frequent perpetrators of instrumental aggression (deliberate aggression to achieve a goal), cold-blooded homicides, intimate partner violence, infidelity, as well as gratuitous, sadistic violence. Carton and Egan (2017) also assessed how the impact of dark triad traits such as narcissism, Machiavellianism and psychopathy would be predictive of

psychological, physical and sexual abuse using the Multidimensional Measure of Emotional Abuse (MMEA) and a revised Conflict Tactics Scale. Their findings showed a significant positive relationship between high psychopathy scores and the perpetration of psychological abuse. Research shows that psychopathic individuals experience less emotional arousal during their crimes than non-psychopathic perpetrators, indicating a lack of fear and empathy during their crimes and deficient emotional responsiveness for the harm they cause their victims (Glenn et al., 2009; Porter & Woodworth, 2002; Porter et al., 2003; Blair, 2010). Their fearless temperament can contribute to their ability to engage in sadistic and instrumental aggression without inhibition or fear of consequences in romantic relationships, leading to what some psychopathy researchers call relationships of omnipresent risk of potential harm (Woody, 2019).

A wealth of neurobiological research suggests that the exploitative and violent tendencies of psychopaths, as well as their instrumental and frustration-related reactive aggression, heightened reward-seeking, callous lack of empathy and remorse, insensitivity to punishment, fearlessness and even sadism also have neural correlates. This may contribute to their resistance to treatment and lack of change to harmful behaviors which could contribute to the PTSD symptomology of their partners. These behaviors and traits can be linked to differences in the brains of psychopaths which includes differences in the amygdala, ventromedial prefrontal cortex, striatum, and other areas of the “moral neural network” which relate to their emotional responsiveness, reward sensitivity, empathy, moral judgment and decision-making (Abler et al., 2005; Lotz et al., 2007; Blair, 2010; Glenn & Raine, 2009; Kiehl, et al. 2001; Raine & Yang, 2006). The amygdala, which features prominently in the fear and the fight-or flight

response, raises the alarm in response to fear, danger, and threat. It is tempered by the prefrontal cortex which plays a role in executive functioning and decision-making and “quiets” down the amygdala after the danger has passed. Research such as fMRI studies and brain scans have found reduced gray matter volume in the amygdala and reduced activity in this region in individuals with high psychopathic traits during tasks related to emotion processing, responses to aversive stimuli, and moral decision-making, suggesting a deficit (Kiehl et al., 2001; Yang, Raine, Narr, Lencz, & Toga, 2006; Glenn & Raine, 2009). These deficits can manifest in interpersonal callousness and may cause emotional injury to those in intimate relationships with those who have psychopathic traits which could contribute to posttraumatic symptomology.

### **Psychopathy, Moral Transgressions and Sadism in Relationships**

Psychopathy is also associated with violating moral norms, which is often associated with the ability to callously commit transgressions such as infidelity, pathological lying, and deception in their intimate relationships. Studies also show that psychopathic traits are associated with a tendency to cheat and a preference for shorter-term exploitative relationships over longer lasting ones (Adams, Luevano, & Jonason, 2014). For example, in a sample of 210 participants who were assessed using the Self-Report Psychopathy Scale III and the Narcissistic Personality Inventory, those who scored higher on narcissism and psychopathy indicated that there was an acceptable amount of risk they would undertake to engage in affairs outside of their primary relationship, as opposed to those who indicated they would never engage in such an affair (Adams et al., 2014). This is important to consider, because as mentioned previously,

research has linked experiencing one's partner's infidelity to posttraumatic symptomology (e.g. Roos et al., 2019).

Numerous studies also show that individuals with higher psychopathy scores are more likely to engage in deception for duping delight and in lies to heighten self-presentation and to obtain a reward, compared to than were those with lower psychopathy scores (Spidel 2010; Rogers & Cruise, 2000). Other studies indicate that psychopathic individuals engage in jealousy induction for the purposes of gaining power and control as well as exacting revenge on one's partner (Massar 2017).

These moral transgressions may have neural correlates, which may contribute to differences in resistance to treatment. These neural correlates may also be related to differences between primary and secondary subtypes of psychopathy. Research has shown that the "primary" subtype of psychopathy – psychopaths theorized to be born rather than shaped by their environment - tend to exhibit more callous-unemotional traits and emotional detachment, whereas secondary psychopaths are more impulsive and anxious (Skeem et al., 2007). While partners who have secondary psychopathic characteristics may not have these more ingrained neurological differences and could have an ability to make changes to their behavior to accommodate their partner's needs and emotions over time, the neural correlates of psychopathy are important to consider as they reveal that such long-standing behaviors may be ingrained not just psychologically but neurobiologically. This more ingrained nature of psychopathy and its lack of malleability may increase the likelihood of PTSD in their romantic partners because such aggressive behaviors tend to be frequent, chronic, and long-lasting features of the

relationship dynamic, and relationship partners may blame themselves for their seeming inability to “change” or “fix” their partners.

A psychopath’s moral transgressions may be linked to differences in the functioning of their orbitofrontal/ventromedial prefrontal cortex as well as reduced function and gray matter volume of the amygdala, which plays a role in understanding the emotional states of others, in integrating moral knowledge with emotional cues, in regulating one’s emotions and curbing antisocial responses to others (Glenn & Raine, 2009). Studies have shown that lesions to these regions can result in several psychopathic behaviors like shallow affect, a lack of guilt or remorse, and pathological lying; the experience of encountering such callous-unemotional traits in an intimate partner could result in posttraumatic symptomology (Anderson, et al., 1999). The inability to curb antisocial responses in intimate relationships may be a key component of what makes romantic relationships with psychopathic individuals so psychologically injurious.

Psychopaths also exhibit a reduced sensitivity to punishment and impairments in moral decision making including everything from interpreting morally disgusting statements to responding atypically to visual or auditory stimuli that deal with moral dilemmas (Glenn, Raine & Schug, 2009). For example, in an fMRI study by Harenski and colleagues (2010), 79 incarcerated males were grouped into psychopathic and non-psychopathic groups using Hare’s PCL-R made evaluations of the moral severity of pictures that did and did not depict moral situations (e.g., an act of violence vs. an argument; a hand breaking into a house vs. a mutilated hand). In psychopaths, there was reduced distinctions between moral and nonmoral pictures in the ventromedial prefrontal cortex and atypical activity in several regions involved in moral decision-making. The

ventromedial cortex is also involved in processing reward and punishment, which may play a key role in the frustration-related aggression some psychopaths are prone to in intimate relationships (Blair, 2007; Blair, 2010).

In another study, Decety and colleagues (2013) conducted brain scans on 37 incarcerated men who scored high on psychopathy, along with other volunteers with low to medium psychopathy scores. They were asked to view images of painful scenarios and imagine these scenarios happening to themselves and others. When imagining this pain in themselves, psychopaths showed a typical response in brain areas like the anterior insula and amygdala, areas which are essential for empathy and pain processing; however, when imagining pain inflicted upon others, activation in these areas decreased and psychopaths who scored higher on interpersonal and affective dimensions of psychopathy showed increased activation in the ventral striatum, the part of the striatum associated with the anticipation of reward.

Hooley and colleagues (2017) assert that one interpretation of this study is that psychopaths see the distress of others as a reward and may even experience pleasure at the sight of others experiencing pain – this pleasure may be heightened by their diminished empathy for the pain of others due to deficits in the brain related to moral reasoning and emotional processing. Although this study is limited by its smaller sample, this interpretation makes sense given the high levels of sadism apparent in the crimes of psychopaths in comparison to non-psychopaths. Further research is needed to determine how being in a romantic liaison with an individual with callous-unemotional traits as well as being exposed to deliberate orchestrated acts of sadistic aggression could affect one's mental health.



## **Psychological Manipulation: Gaslighting, Love Bombing and Stonewalling**

In addition to aggression and intimate partner violence, narcissism and psychopathy have also been associated with specific psychological manipulation tactics such as gaslighting, jealousy induction, malicious envy and sabotage, as well as stonewalling. These manipulation tactics should be considered as part of the more subtle relational transgressions which could contribute to posttraumatic symptomology and tend to be more common in those with narcissistic and psychopathic traits, yet further research is needed to understand these associations, and to see if they are unique predictors of post-traumatic symptoms or if partner traits themselves are more impactful.

Riggs and Bartholomaeus (2018) describe gaslighting as a type of manipulation where the perpetrator tries to convince someone that their thoughts, perceptions or beliefs are invalid. Paige (2019) asserts that gaslighting is also a psychologically abusive attempt to create a surreal interpersonal environment where the victim is depicted as crazy or feels like they are going crazy. The previously mentioned study conducted by Leedom and colleagues (2019) on 104 intimate partner violence survivors who identified being in relationships with those with antisocial and psychopathic traits revealed that gaslighting was a common tactic used by their partners. In fact, qualitative responses by study participants on the 62-item open-ended survey assessing therapeutic alliance and counseling experiences revealed that participants who received validation of their reality after enduring gaslighting tended to have more positive treatment outcomes and stronger therapeutic alliance. Gaslighting is an important manipulation tactic associated with not only antisocial traits but also important to consider in terms of treatment outcomes for survivors of intimate violence.

Gaslighting has been associated with individuals who have psychopathic traits such as disinhibition that is usually characterized by impulsivity and sensation-seeking, and certain forms of gaslighting such as “glamour” and “good guy gaslighting” (Stern, 2007). Psychiatrists have posted that there are three types of gaslighters: the “glamour” gaslighter preys upon tactics such as love bombing to make their partner feel special through excessive flattery and praise. The “good guy” gaslighter satisfies their own narcissistic needs by pretending to care about the well-being of the gaslighted victim, but only encourages behaviors in the victim that allow them to exercise control over that victim. The third type of gaslighter is the “intimidator” gaslighter who engages in direct aggression through cruel and frequent use of criticism and contempt (Stern, 2007).

A study of 250 young adults confirmed the association between antisocial traits and gaslighting by assessing the personality traits of both offenders of gaslighting and their targets (Miano, 2021). This study used a 20-item questionnaire measuring the gaslighting experience as informed by questions posed by Stern (2007), another 25-item questionnaire assessing gaslighting behaviors, measures such as the Personality Inventory for DSM-5 – Informant Form – Adult (PID-5-IRF) which measures traits associated with psychopathy such as antagonism (e.g. item 161: “is good at conning others”) and the Personality Inventory for DSM-5 Brief Form – Adult (PID-5-BF) to measure traits like psychotism (e.g., item 25: “It is easy for me to take advantage of others”).

Therapists concur that gaslighting is a tactic frequently used by those with Narcissistic Personality Disorder and Antisocial Personality Disorder (Sarkis, 2018). However, while clinical and anecdotal support for the connection between gaslighting and narcissistic personalities are strong and many therapists seem to agree that

gaslighting is an issue in these types of romantic relationships, scientific studies of gaslighting are scarce. Further research is needed to establish whether this specific behavior pattern is associated with posttraumatic symptomology, and whether gaslighting is indeed associated consistently with other psychopathic and narcissistic traits and behaviors.

### **Stonewalling**

Stonewalling is another communication style that appears to be used more frequently by individuals with narcissistic and psychopathic traits. Stonewalling consists of refusing to engage in discussions, cooperation and problem-solving in a relationship; it can also include giving someone the silent treatment. According to researchers Follingstad, Coyne & Gambone (2005), emotional abuse includes verbal attacks, ridicule, control over the victim, isolation of the victim and dominance over the victim. Emotional abusers appear to possess a hybrid of avoidance and aggressive orientations, where the perpetrator both aggressively approaches the victim as well as withdraws from them to avoid responsibility for their actions. Stonewalling (withdrawing and ending discussions before they've begun) in particular appears to be part of a demand-withdraw pattern in relationships where victims try to resolve issues or confront the abuse, only to be shut down by their abusers; this is associated with greater marital struggles and is one of the most destructive communication styles in a relationship (Papp, Kouros & Cummings, 2009). These withdrawing behaviors may be perceived by the brain as a form of romantic rejection and such rejection can activate brain networks associated with loss, craving and emotional regulation (Cacioppo, et al., 2016).

In a 2015 study by Horan, Guinn and Banghart, individuals with Dark Triad personality traits were shown to be more likely to use contempt, criticism, stonewalling and defensiveness, known as the Four Horsemen of the Apocalypse which tend to lead to the ending of a relationship (Gottman & Silver, 1999). The study revealed that Machiavellianism and subclinical psychopathy were stronger predictors of this type of destructive conflict communication more so than subclinical narcissism. More research is needed to better understand whether the experience of stonewalling contributes to PTSD symptomology, and whether stonewalling is associated with partner traits of narcissism and psychopathy.

### **Jealousy Induction**

Researchers have found that a narcissist's desire for alternative mates along with their desire for power and control includes a proactive strategy of aggression to induce jealousy in their primary romantic partners by flirting with, boasting about or pursuing other potential mates by engaging in active affairs. Both narcissism and psychopathy have been associated with jealousy induction in intimate relationships. Tortoriello and colleagues (2017) examined jealousy induction in both grandiose and vulnerable narcissists in a sample of 237 undergraduate students using scales such as the Narcissistic Personality Inventory, the Hypersensitive Narcissism Scale (used to measure vulnerable narcissism), the Pathological Narcissism Inventory and the Romantic Jealousy Induction Scale. They found that grandiose narcissists tended to induce jealousy in their partners primarily for power and control, whereas vulnerable narcissists induced jealousy in order to enact revenge, test the relationship, to compensate for low self-esteem, to feel secure within the relationship as well as to experience power and control.

In another study of 244 women and 103 men who completed measures of psychopathy, primary psychopathy predicted jealousy induction to gain control or exact revenge on one's partner, whereas secondary psychopathy predicted inducing jealousy to test the relationship, gain control and power over one's partner and gain self-esteem (Massar et al., 2017). Such methods of jealousy induction may result in relationship insecurity and trauma and requires further investigation as to whether they could potentially produce posttraumatic symptoms. In addition, since these studies were primarily conducted on college students, more investigation is needed into the association between narcissistic and psychopathic traits and jealousy induction in the general population.

### **Love Bombing**

Researchers define love bombing as excessive communication in the beginning of a romantic relationship used to acquire power and control over someone's life as a form of narcissistic self-enhancement (Strutzenberg et al., 2017). It is a manipulation tactic associated with cults and grooming. Many clinicians over the years, however, have connected this tactic as something frequently used by narcissistic and psychopathic personalities especially in the onset of the relationship.

While love bombing has not been as thoroughly explored in the literature as some of the aforementioned behaviors, preliminary research supports that love bombing may be associated with narcissism. In a sample of 484 college students aged 18-30, results showed that love bombing was associated with narcissistic tendencies and negatively correlated with self-esteem, as well as more media and text usage within romantic relationships (Strutzenberg et al., 2017). Love bombing followed by subsequent

devaluation could produce stronger incidences of traumatic bonding, where intermittent periods of abuse and comfort can cause a victim to become even more strongly attached to their perpetrators (Reid et al., 2013, Dutton et al., 1993). Further studies are needed to better understand the association of tactics such as love bombing, partner traits of narcissism and psychopathy and PTSD symptoms in the general population.

### **Malicious Envy**

Malicious envy, envy that includes destructive actions to harm and sabotage another, has also been associated with narcissistic and psychopathic traits. Lange and colleagues (2018) conducted three studies with a total of 3,123 participants and discovered that both benign and malicious envy are associated with the Dark Triad of personality. Another study by Lange and colleagues (2016) previously found that malicious envy is related to vulnerable narcissism and narcissistic rivalry, an antagonistic facet of narcissism. Given this research, relationship partners with narcissistic and psychopathic traits and behaviors may be more prone to sabotaging the goals and plans of those they envy, including their intimate partners. This can lead to what some psychologists call betrayal trauma and potentially PTSD symptoms as a result (Carnes, 2019). A study that incorporates reporting behaviors related to or driven by malicious envy when assessing the symptoms of those who have been in romantic relationships with narcissistic and psychopathic individuals is necessary to better understand what association, if any, there may be between behaviors like sabotage driven by malicious envy and resulting posttraumatic symptoms.

## **Aims and Hypotheses**

Given the literature linking a variety of aggressive attitudes and behaviors with narcissism and psychopathy, there were several aims this study sought to explore. The first aim of this study was to better understand the extent to which partner vulnerable narcissism, partner grandiose narcissism and partner psychopathy predicted PTSD symptomology related to the relationship. It was hypothesized that due to the links among intimate partner violence, PTSD, psychopathy and narcissism as shown in the literature, both forms of partner narcissism and partner psychopathy would have strong, significant positive associations with PTSD symptomology in participants.

The second aim of this study was to determine which partner traits were most associated with an individual's PTSD symptomology related to the relationship. It was hypothesized based on the existing research indicating the more outwardly aggressive aspects of partner grandiose narcissism and partner psychopathy that these would be more strongly and significantly correlated with PTSD symptomology in participants than partner vulnerable narcissism.

The third aim of this study was to explore which facets of the four PTSD categories (intrusion, avoidance, changes in cognition and mood, arousal) had stronger associations with which partner traits. It was hypothesized that due to the aggressive, sadistic and violent tendencies associated with psychopathy, psychopathy would be most associated with PTSD changes in avoidance and arousal. It was also hypothesized that, due to the hypersensitive nature of vulnerable narcissism and its potential for "narcissistic rage" (e.g. Krizan & Johar, 2015), intrusion and changes in cognition and mood would be associated with vulnerable narcissism, with a similar effect for grandiose narcissism.

The fourth aim of this study was to better identify the role that more covert, underhanded manipulation methods such as gaslighting, stonewalling, love bombing, jealousy induction may play in contributing to posttraumatic symptomology. We investigated whether these behaviors would be significantly correlated with these partner traits and whether these methods would be even stronger predictors of PTSD symptomology than narcissistic or psychopathic traits themselves. It was predicted that all manipulation methods especially gaslighting would contribute significantly to PTSD symptomology given their potential for creating psychological distress for victims, and that all manipulative behaviors would be significantly correlated with these traits.

The fifth aim of the study was to identify whether there are any gender differences in PTSD symptomology and experiences of partner vulnerable narcissism, partner grandiose narcissism and psychopathy. Since much of the literature focuses on female intimate partner violence victims, it is important to determine whether women might experience PTSD symptomology at different rates than males or non-binary individuals. It was hypothesized that due to sociocultural factors and the fact that males are diagnosed with NPD and psychopathy at a higher rate, heterosexual women might have slightly higher rates of PTSD symptomology associated with all three partner traits.



## Chapter II

### Method

This research study consisted of voluntary participants who were recruited to take an extensive online survey assessing relationship characteristics, partner traits and PTSD symptomology. They were asked to report on a current or past romantic relationship partner who they considered to have the most narcissistic or psychopathic traits.

#### **Participants**

A total of 1294 voluntary participants residing in the United States ages 21-83 years old completed the entire survey. The majority of participants were female (93.8%). There were 66 males and 14 individuals who identified as non-binary/third gender. Most participants reported experiencing some form of abuse and identified experiencing at least one form of abuse in the questionnaire provided.

#### **Recruitment**

Following IRB approval by the Harvard University Institutional Review Board, participants ages 21 and over in the United States who self-identified as having been in a romantic relationship with an individual with narcissistic and/or psychopathic traits were recruited online to take a survey about their experiences in the romantic relationship and any trauma-related symptoms they endured. Social media managers and influencers who run social media pages centered on narcissism, psychopathy, and/or domestic violence

with an average following of 50,000-100,000 followers or more were asked by e-mail or messaging via the respective social media platform to share the survey link and information across their pages. When sharing the survey, social media managers fully disclosed that they were not part of the research study team, that their followers would not receive any benefits from participating in the study from them, that participants should only participate in the survey out of their own desire and willingness to contribute to the research, and that all questions and concerns could be directed to the principal investigator. This was disclosed to reduce undue influence. A similar method of online recruitment has been successfully used by past researchers to recruit survivors of abusers specifically with psychopathic traits (e.g. Pagliaro, 2009; Humeny, 2021).

## **Measures**

Participants completed the following questionnaires in the survey.

### **PTSD Checklist for DSM-5 (PCL-5)**

The PCL-5 is a 20 item self-report questionnaire that helps to screen individuals with PTSD. It takes approximately 5-10 minutes to complete. The self-report rating scale for the PCL-5 uses a Likert scale from 0-4 for each symptom and rating scale descriptors remain the same for every question: "Not at all," "A little bit," "Moderately," "Quite a bit," and "Extremely." These questions cover diagnostic categories for PTSD such as avoidance symptoms, intrusion/re-experiencing symptoms, negative changes in cognition and mood as well as changes in arousal and reactivity. For example, a sample item from the PCL-5 measuring intrusion is, "In the past month, how much were you been bothered

by: "Repeated, disturbing, and unwanted memories of the stressful experience?" Response: 5-point Likert (0 = "Not at all" to 4 = "Extremely").

Researchers have confirmed that PCL-5 test scores demonstrated good internal consistency ( $\alpha = .96$ ), test-retest reliability ( $r = .84$ ), and convergent and discriminant validity (Bovin et al., 2016). Analyses using the CAPS-5 revealed that PCL-5 scores of 31 to 33 were the most probable scores for PTSD in clinical settings (Bovin, et al. 2016). Preceding PCL questions, participants were told to think about their relationship with the individual in question when responding to ensure that PTSD symptoms related to the relationship were considered.

#### **Sample Question from PCL-5:**

In the past month, how much were you bothered by:

1. Repeated, disturbing dreams?
2. Feeling very upset when something reminded you of something that happened during the event?
3. Avoiding memories, thoughts, or feelings related to event?
4. Blaming yourself or someone else for the event or what happened after it?
5. Irritable behavior, angry outbursts, or acting aggressively?

Responses by Participants are on a 5-point Likert scale (0 = "Not at all" 1= "A little bit" 2= "Moderately" 3= "Quite A Bit" to 4 = "Extremely").

## **The Informant Five Factor Narcissism Inventory (IFFNI) Male and Female Versions**

A wealth of research demonstrates that informant ratings of narcissism align more with expert assessments of NPD in an individual than self-ratings of narcissism (e.g. Miller et al., 2005; Carlson et al., 2013). This makes sense given that narcissism is associated with an overinflated sense of self and can lead to distortions in self-report (e.g. Grivjalva & Zhang, 2016). The reports of informants – such as family members, friends, and romantic partners may be useful in combating self-presentational and impression management biases and presenting a more accurate picture of narcissism and psychopathy in partners.

The Informant Five Factor Narcissism Inventory (IFFNI) is an informant version of the FFNI, the Five Factor Narcissism Inventory. The original FFNI is a 148-item self-report measure of narcissism which uses a Likert scale with 1 (*strongly disagree*) to 5 (*strongly agree*) to measure vulnerable and grandiose aspects of narcissism. The vulnerable scales include facets of narcissism such as Reactive Anger, Shame, Need for Admiration, Cynicism/Distrust. The grandiose scales include Indifference, Exhibitionism, Thrill-Seeking, Authoritativeness, Grandiose Fantasies, Manipulativeness, Exploitativeness, Entitlement, Arrogance, Lack of Empathy and Acclaim-Seeking. The internal consistency of the IFFNI scales were good, with Cronbach alphas ranging from  $\alpha = .74$  (measuring Cynicism/Distrust) to  $\alpha = .90$  (measuring Thrill-Seeking) (Oltmanns, et al. 2018). In the Informant Version of this scale, items were changed from using “I” to “He” or “She” respectively in the male and female versions of the scale. The initial

validation of the scale support the convergent and discriminant validity of the IFFNI, and suggests self-informant agreement for measuring grandiose narcissism especially.

**Sample Items from the IFFNI include:**

If he feels slighted, he gives the person who slighted him a piece of his mind.

People find themselves bending to his will on a regular basis without even realizing it.

She feels enraged when people disrespect her.

She can maneuver people into doing things.

The criticism she gets sometimes makes her really mad.

**Modified Self-Report Psychopathy Scale-Short (MSRP-SF)**

The MSRP-S is a 29-item scale adapted from the short version of the Self-Report Psychopathy Scale III (SRP-III) to assess how the partners of psychopathic individuals report on these individuals. The 29 items were chosen to evaluate psychopathic traits from a third-party, informant perspective and asks participants to rate psychopathic traits of their partner on a Likert scale from 1 (Disagree Strongly) to 5 (Strongly Agree).

The SRP-III and its short form, SRP-SF are based on the PCL-R by Hare and have demonstrated good internal consistency ( $\alpha = .79$ ; Paulhus & Williams, 2002;  $\alpha = .86$ , Paulhus et al., 2016) as well as good reliability and validity in subclinical populations (Hare et al., 2007; Neal & Sellbom, 2012). The SRP-III has also shown good convergent validity with related measures of psychopathy such as the PPI (Lilienfeld & Widows, 2005), as well as behaviors such as bullying ( $r = .37$ ), sexual aggression ( $r = .38$ ), and dating violence ( $r = .32$ , Williams et al., 2005). The short form of the SRP-III has a four-

factor structure that coincides with facets of psychopathy such as lifestyle, affective, interpersonal and antisocial traits.

The validity of the MSRP-S was tested by researchers Uzieblo and colleagues (2011) when they studied 154 female participants' ratings of their partner's traits and their male partners' own self-reports, revealing significant correlations between self-other ratings. Although it would be presumed that participants might exaggerate psychopathic traits in their partners, female participants actually tended to underestimate their male partner's psychopathic traits, likely due to the level of deception involved, which reveals that such a scale would not lead to an exaggeration bias. Beaudette (2012) also showed that the MSRP-S demonstrated fair internal consistency ( $\alpha = .42$  to  $.80$ ) in their study of individuals who had experienced psychopathic colleagues.

### **Victimization Screening Survey, Modified**

The Victimization Screening Survey is a 14-item questionnaire developed by Humeny and colleagues (2011) based on Pagliaro's (2009) questionnaire that captures experiences with individuals who have psychopathic traits. It includes questions such as the sex of the abuser, abuse frequency, and the types of abuse experienced such as sexual abuse, physical abuse, and deception using Likert scales.

This survey was slightly modified to include an open-ended question section for those who wanted to expand on their experiences with the different forms of abuse, and it excluded one question regarding hospitalization due to physical injury that posed a risk of being a trigger. It also added four questions which assessed the presence of love bombing, gaslighting, stonewalling, and jealousy induction. Gaslighting was assessed by the question, "Have you encountered attempts by this partner to deny your perception of

reality, thoughts or feelings?” Love bombing was evaluated by the question “Did you experience excessive flattery and constant contact at the beginning of the relationship from this partner, only to have this behavior abruptly end rather than slowly fade?”

Stonewalling was assessed by the question “Did this partner often shut down conversations or attempts at starting discussions around their inappropriate behavior?”

Finally, jealousy induction was assessed by the question, “Did this partner ever try to make you purposely jealous or insecure about their fidelity in the relationship?”

Participants were told to feel free to elaborate on their answer and give examples if they felt comfortable doing so for these questions.

### **Procedure**

Participants who were interested in taking the survey clicked the anonymous Qualtrics link to the survey on the recruitment image or caption and were first directed to a detailed informed consent page. This informed consent page included information about the sensitive nature of the study, the fact that participants would be asked trauma-related questions related to relationship abuse as well as childhood abuse, and the fact that they would be reporting on the potentially narcissistic and psychopathic traits of romantic partners. The informed consent form also contained detailed information about the design and format of the survey so that participants were aware they would be completing open-ended questions about their abuse and trauma history, followed by three lengthier questionnaires regarding trauma-related symptoms and partner traits.

Participants were informed they would be taking the survey for approximately an hour and that their data would be anonymized. They were also informed of the risk of emotional distress they might experience while taking the study and the fact that they

could opt out of the study at any time. They were told that elaborating on any open-ended questions was entirely optional and that they would also be provided a list of online resources in the case of distress after the completion of the survey.

After clicking “Yes, I consent” to the survey, participants were first directed to a page collecting basic demographic information such as sex, age, sex of the partner they believed had the most narcissistic and/or psychopathic traits which they chose to report on, the status of the romantic relationship and the relationship duration. On the next page, they were asked to answer a series of multiple-choice questions, some of which had the option of elaborating in open-ended responses if participants felt comfortable and willing to do so. These questions included items such as how frequently participants experienced abuse by this romantic partner, as well as what kinds of non-violent but harmful acts they experienced at the hands of this partner with the option for elaborating under each form of nonviolent abuse (emotional abuse, spiritual, substance, financial, property crime, deceit). They then answered open-ended questions about the presence of gaslighting, love bombing, stonewalling and jealousy induction in their relationship with items such as “Have you encountered attempts by this partner to deny your perception of reality, thoughts or feelings?” and “Did this partner ever try to make you purposely jealous or insecure about their fidelity in the relationship?”

After completing this section, participants completed three questionnaires: the PCL-5, which measured their PTSD symptomology related to the relationship, the IFFNI (Informant Five Factor Narcissism Inventory) which assessed the narcissistic traits of their romantic partner, and the Modified Self-Report Psychopathy Scale to assess the psychopathic traits of their partner. After completing the survey, participants were given



a list of online resources such as the National Domestic Violence Hotline or Psychology Today's directory of therapists, which they could consult if necessary.

### **Data Cleaning and Recoding Protocol**

The data from the study was filtered to include only those who fully completed the PCL-5, IFFNI, and Modified Self-Report Psychopathy Scales. Then, 6 participants who had more than 5% missing data on items of scales such as the PCL-5, IFFNI, and Modified Self-Report Psychopathy scale were removed from the remaining data set. Nineteen participants who were missing 1 to 4 items were still included and scale mean scores were calculated based on the data that was captured. This resulted in a data set of 1294 participants in total.

Prior to analysis, we adjusted reverse-scored items on the Informant Five Factor Narcissism scale (e.g. He doesn't get angry when things don't go his way) and the Modified Self-Report Psychopathy scale as appropriate. Reliability analyses were used to ensure that the IFFNI, the Modified Self-Report Psychopathy scales and PCL-5 showed internal consistency. Items on the IFFNI were then separated into subscales as indicated on the scoring guide by computing the mean of the specified items into that subscale (e.g., computing the mean of specific items for the Manipulativeness subscale). In subsequent analyses, these individual subscales were then respectively recoded into the variables Grandiose and Vulnerable narcissism. PTSD was computed first as a mean overall by using all items from the scale for initial analyses, and in subsequent analyses computed and broken down into subcategories of intrusion, avoidance, mood and cognition and arousal using the specified items for each category in accordance with DSM-5 descriptions of each category.

## Chapter III

### Results

The results of this study revealed significant associations among narcissism, psychopathy and PTSD symptomology, even when other variables were accounted for.

#### **Sample Characteristics**

There were a total of 1294 participants all of whom reported residing in the United States. 1214 (93.8%) of the participants were female, 66 (5.1%) were male and 14 (1.1%) identified as non-binary or third gender. The ages of the participants ranged from 21-83 years old with a mean age of 44. A majority of participants (95.7%) reported being in a heterosexual romantic relationship. One thousand seventy-six (83.2%) participants reported no longer being in the romantic relationship and 218 (16.8%) participants reported still being in the romantic relationship. For those who were no longer in the relationship, the romantic relationship lasted an average of 4.77 years ( $SD = 1.57$ ). For participants still in the relationship, participants reported being in the relationship for an average of 5.46 years at the time of taking the survey ( $SD = 1.39$ ). Most participants reported experiencing at least one form of abuse with a mean average of reported abuse being 3.34 ( $SD = 0.81$ ).

Over half of survey participants (51.5%) reported experiencing abuse very frequently by their romantic partner. Only a small percentage (3.6%) of participants reported experiencing only a single incident of abuse. Eighteen participants declined to answer this section, indicative of not experiencing any abuse. While 41.9% of

participants reported experiencing mild injury, 38.2% reported experiencing no physical injury at all.

A total of 1255 individuals or 97% of participants reported having experienced emotional abuse. It was found that 58.4% participants (756) reported having experienced spiritual abuse. A majority, 92% or 1190 participants reported experiencing deceit. Furthermore, 61.7% reported experiencing property crime. Finally, 57.2% reported experiencing substance abuse which the Victimization Screening Survey specifically defines as forced intoxication.

In terms of more specific manipulation tactics, the vast majority of participants reported consistently experiencing gaslighting (95.1%), 78.6% reported experiencing love bombing, 93.2% reported experiencing stonewalling, and 76.2% confirmed experiencing jealousy induction. An overwhelming majority (99.1%) reported having experienced abuse in other relationships. Specifically, 65.6% of participants reported experiencing childhood abuse, 24% reported experiencing abuse by a previous romantic partner apart from the one they were reporting on, 8.1% reported having experienced abuse by multiple romantic partners and 1.4% reported experiencing abuse in a different context.

Table 1. Descriptive Statistics

Variable	Cronbach's				
	$\alpha$	$M$	$SD$	<i>Skewness</i>	<i>Kurtosis</i>
PTSD	.92	3.54	0.76	-0.45	-0.27
Reactive Anger	.82	4.36	0.57	-1.22	1.61
Shame	.84	3.69	0.76	-0.39	-0.27
Indifference	.88	2.27	0.85	0.54	-0.31
Need for Admiration	.69	3.75	0.52	-0.62	0.79
Exhibitionism	.89	3.90	0.83	-0.71	-0.16
Authoritativeness	.86	4.22	0.63	-0.81	0.23
Grandiose Fantasies	.91	3.84	0.83	-0.50	-0.34
Manipulativeness	.78	4.35	0.51	-0.93	0.76
Exploitativeness	.81	4.28	0.56	-1.13	1.53
Entitlement	.85	4.50	0.52	-1.36	1.88
Lack of Empathy	.78	4.15	0.58	-0.77	0.51
Arrogance	.81	4.15	0.60	-0.76	0.37
Acclaim-Seeking	.90	3.54	0.85	-0.25	-0.53
Thrill Seeking	.90	3.71	0.91	-0.52	-0.47
Distrust	.73	3.73	0.61	-0.21	-0.28
Psychopathy	.93	3.58	0.68	-0.43	0.07

Table 2. Correlations Between PTSD, Partner Narcissism, and Partner Psychopathy

Variable	PTSD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Reactive Anger	.17**															
2. Shame	.12**	.28**														
3. Indifference	-.08**	-.30**	-.74**													
4. Need for Admiration	.13**	.28**	.55**	-.57**												
5. Exhibitionism	.16**	.17**	.04	-.11**	.24**											
6. Authoritativeness	.16**	.35**	.05	-.07*	.11**	.49**										
7. Grandiose Fantasies	.19**	.23**	.15**	-.18**	.22**	.46**	.54**									
8. Manipulativeness	.26**	.24**	.01	-.06*	.19**	.37**	.45**	.34**								
9. Exploitativeness	.23**	.35**	.04	-.08**	.21**	.35**	.48**	.48**	.70**							
10. Entitlement	.20**	.43**	.10**	-.19**	.29**	.35**	.45**	.45**	.58**	.70**						
11. Lack of Empathy	.19**	.30**	-.03	.01	.11**	.10**	.19**	.19**	.36**	.50**	.52**					
12. Arrogance	.22**	.42**	.11**	-.15**	.25**	.47**	.63**	.58**	.42**	.59**	.64**	.44**				
13. Acclaim-Seeking	.11**	.09**	.15**	-.11**	.02	.30**	.51**	.63**	.20**	.30**	.17**	.03	.44**			
14. Thrill Seeking	.18**	.21**	.01	.01	.15**	.39**	.24**	.29**	.39**	.40**	.31**	.22**	.29**	.14**		
15. Distrust	.14**	.39**	.23**	-.18**	.21**	-.03	.15**	.16**	.16**	.27**	.23**	.26**	.25**	.09**	.22**	
16. Psychopathy	.24**	.37**	.05	-.05	.25**	.29**	.28**	.32**	.49**	.59**	.50**	.40**	.40**	.02	.72**	.36**

\* $p < .05$ , \*\* $p < .01$

Table 3. PTSD Regressed on Vulnerable and Grandiose Narcissism

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Vulnerable Narcissism	0.22	0.05	0.13	4.50	<.001
Grandiose Narcissism	0.33	0.06	0.18	5.50	<.001
Psychopathy	0.11	0.04	0.10	2.84	.005

## **Relationships Between Partner Narcissism, Partner Psychopathy and PTSD**

Table 1 shows the descriptive statistics of the study participant's PTSD scores, partner's narcissism scores, and partner psychopathy scores. Reliability analyses were performed to test the internal consistency of scales used the consistencies of the scales were adequate, achieving a Cronbach's alpha of .60 or above for all scales. All scales demonstrated normal distribution, with some negative skewness and positive kurtosis on the following narcissism subscales: reactive anger, exploitativeness, and entitlement. Since this study had a large sample size, this provided enough confidence for parametric tests.

Table 2 shows the Pearson two-tailed correlations among an individual's PTSD scores, their partner's narcissism scores, and their partner's psychopathy scores. Most subscales of narcissism show significant positive correlations, with subscales such as manipulativeness ( $r = .26, p < .001$ ), exploitativeness ( $r = .23, p < .001$ ), entitlement ( $r = .20, p < .001$ ) arrogance ( $r = .22, p < .001$ ), psychopathy ( $r = .24, p < .001$ ) and lack of empathy ( $r = .19, p < .001$ ) being some of the highest correlations.

However, indifference showed a significant but small negative correlation ( $r = -.08, p = .003$ ). Table 3 shows the results of the linear regression analysis where PTSD was predicted by vulnerable narcissism, grandiose narcissism and psychopathy. This model was significant,  $R^2 = .10, F(3, 1290) = 45.10, p < .001$ . It should be noted that an analysis of multicollinearity showed that the tolerance values were above .10 and the Variance Inflation Factors were greatly below 10 (with 1.62 being the highest for psychopathy) for the subscales of narcissism and psychopathy, revealing no multicollinearity among these scales that would affect these results. This indicates that those who reported higher scores

on grandiose narcissism, vulnerable and psychopathy experienced a higher level of PTSD symptoms. Nearly 10% of the variance of PTSD can be explained by partner narcissism and psychopathy scores. Both vulnerable and grandiose narcissism were significant predictors of PTSD,  $p < .001$ , and so was psychopathy,  $p = .005$ . This model forms the basis for the subsequent analyses below.

Table 4. PTSD Regressed on Narcissism, Psychopathy, and Experiences of Abuse by Relationship Status

Variable	No longer in Relationship			Still in Relationship		
	<i>B</i>	<i>SE</i>	$\beta$	<i>B</i>	<i>SE</i>	$\beta$
Vulnerable Narcissism	0.18	0.06	0.10**	0.22	0.12	0.14
Grandiose Narcissism	0.35	0.07	0.18***	0.13	0.14	0.08
Psychopathy	0.02	0.05	0.02	0.18	0.09	0.19*
Abuse Frequency	0.13	0.03	0.14***	0.22	0.06	0.24***
Physical Abuse	0.08	0.03	0.09**	0.00	0.07	0.00
Degree of Gaslighting	0.00	0.09	0.00	0.29	0.23	0.09
Degree of Love bombing	0.10	0.05	0.07*	-0.02	0.10	-0.02
Degree of Stonewalling	0.05	0.09	0.02	-0.04	0.17	-0.02
Degree of Jealousy Induction	0.09	0.03	0.08*	0.05	0.07	0.05
Previous Abuse	0.07	0.02	0.09**	0.14	0.06	0.16*
Relationship Duration	0.01	0.02	0.03	0.00	0.04	-0.01

\* $p < .05$ , \*\*  $p < .01$ ,  $p < .001$  \*\*\*

### **PTSD, Partner Narcissism, Partner Psychopathy by Relationship Duration**

Further linear regression analyses were applied to investigate whether partner narcissism and psychopathy were still significant predictors of PTSD symptoms related to the relationship when variables such as relationship status, relationship duration, previous abuse and other forms of manipulation such as gaslighting, love bombing, stonewalling and jealousy induction were also taken into account.

It should be noted that there was no significant difference in PTSD scores between the subsample of participants who were still in the relationship ( $M=3.53$ ,  $SD=0.73$ ) and the subsample of participants who were no longer in the relationship ( $M=3.55$ ,  $SD=0.76$ ). However, participants who were no longer in the relationship reported having experienced more physical abuse ( $M = 1.86$ ,  $SD = 0.81$ ) than participants still in the relationship ( $M = 1.73$ ,  $SD = 0.81$ ),  $t(1281) = 2.21$ ,  $p = .027$ . Because a majority of the sample was no longer in the relationship and those who were no longer in the relationship tended to experience physical abuse at higher rates, separate analyses were carried out to discern whether there would be differences. The results of these analyses are shown in Table 4.

For individuals who were no longer in the relationship, vulnerable and grandiose narcissism, as well as abuse frequency and previous abuse remained significant predictors of PTSD,  $p < .01$ . Grandiose narcissism ( $\beta=0.18$ ,  $p < .001$ ), abuse frequency ( $\beta=0.14$ ,  $p < .001$ ) and vulnerable narcissism ( $\beta=0.10$ ,  $p = .002$ ) had the largest most significant effect sizes for this subsample. Notably, grandiose narcissism remained the largest predictor of PTSD for individuals no longer in the relationship, even after taking into account other



variables such as previous abuse which included abuse by a different partner, multiple partners or childhood abuse. However, psychopathy was no longer a significant predictor. Physical abuse was also a significant but small predictor, and smaller significant effects were found for previous abuse, the degree of love bombing, jealousy induction (see Table 4). No significant effects were found for gaslighting or stonewalling. This model explained 16.2% of the variance in PTSD symptoms,  $F(11, 930) = 16.32, p < .001$ .

For individuals who were still in the relationship, only psychopathy and abuse frequency were significant predictors in PTSD symptoms,  $R^2 = .25, F(11, 169) = 5.16, p < .001$  (see Table 4). However, abuse frequency ( $\beta=0.24, p < .001$ ) had a larger and more significant effect size than psychopathy ( $\beta=0.19, p = .046$ ). There was a smaller but significant effect found for previous abuse ( $\beta=0.16, p = .019$ ). Both grandiose and vulnerable narcissism were no longer significant predictors of PTSD symptoms for individuals who were still in the relationship. No other significant effects were found for physical abuse, or other forms of manipulation such as the degree of love bombing, jealousy induction, stonewalling or gaslighting for those still in the relationship.

Two-tailed Pearson correlation tests were also performed to investigate which aspects of grandiose narcissism affected the PTSD scores of both subgroups separately. All subscales of grandiose narcissism were positively and significantly correlated with PTSD for those who were no longer in the relationship. For those who were still in the relationship, all aspects of grandiose narcissism were positively and significantly correlated with PTSD as well except for acclaim-seeking which was not significant.

Table 5. Correlations Among PTSD Dimensions, Partner Narcissism and Partner Psychopathy

<b>Scale</b>	<b>Reexperiencing</b>	<b>Avoidance</b>	<b>Cognition/Mood</b>	<b>Hyperarousal</b>
Vulnerable Narcissism	.198***	.172***	.121***	.191***
Grandiose Narcissism	.286***	.281***	.173***	.187***
Psychopathy	.262***	.240***	.141***	.209***

\*\*\* indicates a significance level of  $p < .001$  for this chart

Table 6. PTSD Intrusion/Reexperiencing Regressed on Narcissism and Psychopathy

<i>Variable</i>	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Vulnerable Narcissism	.24	0.06	0.12	4.19	< .001
Grandiose Narcissism	.43	0.07	0.20	6.20	< .001
Psychopathy	.14	0.04	0.11	3.21	.001

Table 7. PTSD Avoidance Regressed on Narcissism and Psychopathy

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Vulnerable Narcissism	.23	0.07	0.10	3.43	< .001
Grandiose Narcissism	.53	0.08	0.21	6.53	< .001
Psychopathy	.13	0.05	0.09	2.53	.012

Table 8. PTSD Cognition and Mood Regressed on Narcissism and Psychopathy

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Vulnerable Narcissism	.17	0.06	0.08	2.72	.007
Grandiose Narcissism	.30	0.07	0.14	4.05	< .001
Psychopathy	.05	0.05	0.04	1.02	.308

Table 9. PTSD Hyperarousal Regressed on Narcissism and Psychopathy

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Vulnerable Narcissism	.27	0.06	0.13	4.61	< .001
Grandiose Narcissism	.20	0.07	0.10	2.92	.004
Psychopathy	.14	0.04	0.11	3.17	.002

### **PTSD Symptom Clusters, Partner Narcissism, and Partner Psychopathy**

Additional correlation and regression analyses were performed to determine what PTSD diagnostic symptom dimensions seemed to be most strongly correlated with and be predicted by partner narcissism scores and partner psychopathy scores. First, four distinct PTSD diagnostic dimensions were computed using their respective symptoms in accordance with the diagnostic categories for PTSD listed in DSM-5. The internal consistency of these scales were tested and were all shown to be consistent based on their Cronbach's alpha. The first dimension was reexperiencing/intrusion symptoms which included reexperiencing memories, nightmares, flashbacks as well as emotional and physiological triggers of the traumatic event,  $\alpha = .83$ . The second dimension consisted of avoidance symptoms,  $\alpha = .77$ , which included avoidance of internal (such as thoughts and emotions) reminders as well as external reminders of the traumatic event. The third dimension related to negative changes in mood and cognition,  $\alpha = .86$ , such as the development of negative beliefs, self-blame, anhedonia, and an inability to experience positive emotions. Finally, the fourth dimension computed consisted of hyperarousal symptoms such as risky behavior and self-harm, a heightened startle response, difficulty concentrating, hypervigilance and sleep problems,  $\alpha = .78$ .

### **Correlations Between PTSD Symptom Clusters, Partner Narcissism and Partner Psychopathy**

Initial correlation analyses revealed that all four PTSD symptom clusters were positively and significantly correlated with partner narcissism (both vulnerable and

grandiose) scores and psychopathy scores,  $p < .001$ . These results are presented in Table 5. Most notably, PTSD intrusion and reexperiencing symptoms had the highest level of positive correlations overall for partner grandiose narcissism ( $r = .29$ ), followed by partner psychopathy ( $r = .26$ ), and partner vulnerable narcissism ( $r = .20$ ). The PTSD dimension of Avoidance had higher correlations for partner grandiose narcissism ( $r = .28$ ) and partner psychopathy ( $r = .24$ ) compared to partner vulnerable narcissism ( $r = .17$ ). For the PTSD dimension indicating changes in cognition and mood, partner grandiose narcissism had the highest correlation ( $r = .17$ ), followed by partner psychopathy ( $r = .14$ ) and vulnerable narcissism ( $r = .12$ ). Finally, for the PTSD symptom dimension of arousal and reactivity, it was actually partner psychopathy ( $r = .21$ ) which had the highest correlation, followed by similarly sized correlations with vulnerable narcissism ( $r = .19$ ) and grandiose narcissism ( $r = .19$ ), although interestingly vulnerable narcissism had a slightly higher correlation.

### **Regressions for PTSD Symptom Clusters, Partner Narcissism and Partner Psychopathy**

When regression analyses were performed regressing the different dimensions of PTSD on narcissism and psychopathy, nearly 11% of the variance in PTSD intrusion symptoms was explained,  $R^2 = .11$ ,  $F(3, 1290) = 52.30$ ,  $p < .001$ . The model accounted for 10% of the variance in PTSD avoidance symptoms,  $R^2 = .10$ ,  $F(3, 1290) = 45.91$ ,  $p < .001$ . The model did not explain as much variance in PTSD changes in cognition and mood,  $R^2 = .04$ ,  $F(3, 1290) = 16.94$ ,  $p < .001$ . Notably, for the changes in cognition and mood dimension, grandiose and vulnerable narcissism remained significant predictors of this dimension, but psychopathy was not significant once controlled for narcissism.

Finally, the model explained only a small amount of variance in the hyperarousal and reactivity dimension in PTSD  $R^2 = .07$ ,  $F(3, 1290) = 30.34$ ,  $p < .001$  but this dimension was still significantly predicted by grandiose narcissism, vulnerable narcissism and psychopathy. The results of these models are shown in Tables 6-9.

As can be seen in Tables 6-9, these regressions revealed which personality traits most strongly predicted which facets of PTSD. For PTSD intrusion symptoms, grandiose narcissism ( $\beta=0.20$ ) and vulnerable narcissism ( $\beta=0.12$ ) remained the most significant predictors ( $p < .001$ ) with the largest effect sizes, although psychopathy ( $\beta=0.11$ ) was also significant ( $p = .001$ ). For PTSD avoidance symptoms, grandiose narcissism ( $\beta=0.21$ ) and vulnerable narcissism ( $\beta=0.10$ ) had the largest effect sizes and were significant ( $p < .001$ ), although psychopathy was also significant ( $\beta=0.09$ ,  $p = .012$ ). For PTSD cognition and mood symptoms, grandiose narcissism ( $\beta=0.14$ ) was the most significant predictor,  $p < .001$ , followed by vulnerable narcissism ( $\beta=0.08$ ,  $p = .007$ ) and psychopathy failed to reach significance. For PTSD hyperarousal symptoms, it was vulnerable narcissism ( $\beta=0.13$ ) which was the most significant predictor with the largest effect size,  $p < .001$ , followed by psychopathy ( $\beta=0.11$ ,  $p = .002$ ) and grandiose narcissism had the smallest effect size and significance ( $\beta=0.10$ ,  $p = .004$ ).

### **Examining Gender Specific Effects**

To determine whether there were any gender differences in PTSD scores based on predictors like partner narcissism and psychopathy, a univariate analysis of variance was performed to compare mean differences. The results show no significant between-subjects effect for gender  $F(2, 1291) = 2.41$ ,  $p = .091$ . PTSD mean scores tended to be higher for participants who identified as non-binary/third gender ( $M = 3.98$ ,  $SD = 1.07$ )

compared to groups of males ( $M = 3.51, SD = 0.72$ ) and females ( $M = 3.54, SD = 0.75$ ). However, since the non-binary group consisted of a small number of people, subsequent comparisons were made between males and females only due to insufficient statistical power.

Table 10. PTSD Regressed on Narcissism and Psychopathy with Gender Effects

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
<b>Main Effects</b>					
Vulnerable	0.21	0.05	0.12	4.26	<.001
Narcissism					
Grandiose Narcissism	0.32	0.06	0.18	5.39	<.001
Psychopathy	0.11	0.04	0.10	2.85	.004
Gender	-0.03	0.09	-0.01	-0.32	.746
<b>Interaction Included</b>					
Vulnerable	0.21	0.05	0.12	4.19	<.001
Narcissism					
Grandiose Narcissism	0.90	0.23	0.49	3.97	<.001
Psychopathy	0.11	0.04	0.10	2.83	.005
Gender	2.23	0.86	0.66	2.59	.010
Grandiose	-0.60	0.23	-0.77	-2.64	.008
Narcissism*Gender					

Note. Gender was dummy coded Males = 0, Females = 1

The moderation effect of gender was tested by using interaction terms where gender was converted to a dummy variable with males used as the reference category. The main effect for gender was added to the model in Table 3, and then interaction terms were included. Table 10, Main Effects shows that the effect of gender was insignificant and that the main effects of narcissism and psychopathy remained significant even after controlling for gender.

Interaction effects which were not significant were not retained in the model and effects are only presented in-text for full disclosure. While there were no significant interaction effects between gender and vulnerable narcissism ( $B = 0.12$ ,  $SE = 0.22$ ,  $t(1274) = 0.55$ ,  $p = .581$ ) or gender and psychopathy ( $B = 0.02$ ,  $SE = 0.14$ ,  $t(1274) = 0.15$ ,  $p = .882$ ), there was a significant interaction between grandiose narcissism and gender specifically ( $B = -0.67$ ,  $SE = 0.29$ ,  $t(1274) = -2.33$ ,  $p = .020$ ). There was a significant positive relationship between grandiose narcissism and PTSD for both males and females, but this relationship was stronger for males. Although both males and females exhibit a higher level of PTSD symptomology when their partners have a greater number of narcissistic and psychopathic traits, grandiose narcissism had a more significant impact on male participants' PTSD scores,  $R^2 = .10$ ,  $F(5, 1274) = 27.51$ ,  $p < .001$ .

### **Correlations for Partner Traits and Love Bombing, Jealousy Induction, Gaslighting, and Stonewalling**

Correlation analyses were conducted to investigate whether vulnerable narcissism, grandiose narcissism and psychopathy were positively correlated with engaging in more behaviors such as gaslighting, love bombing, stonewalling and jealousy induction. Table 11 shows these correlations. Vulnerable narcissism, grandiose



narcissism, and psychopathy were all significantly and positively correlated with love bombing, stonewalling and jealousy induction, suggesting that these partner traits increased the likelihood of these behaviors. However, gaslighting was only weakly and significantly associated with grandiose narcissism and not significantly correlated with psychopathy or vulnerable narcissism.

Table 11. Correlations for love bombing, gaslighting, stonewalling, jealousy induction and partner traits

	Degree of gaslighting	Degree of love bombing	Degree of stone walling	Degree of jealousy induction
Vulnerable narcissism	.05	.12***	.08**	.17***
Grandiose narcissism	.07**	.19***	.14***	.28***
Psychopathy	.02	.15***	.10***	.29***

\* $p < .05$ , \*\*  $p < .01$ , \*\*\* $p < .001$

### **Analyses of Open-Ended Responses**

Since correlation analyses revealed significant positive correlations between partner traits and behaviors like love bombing, stonewalling and jealousy induction, open-ended responses were analyzed to investigate whether these behaviors could

potentially have an impact on PTSD symptoms in a way that was not captured in regression analyses. Methods of phenomenological analysis (Smith & Nizza, 2022) and critical thematic analysis (Braun & Clarke, 2006) were both used to determine thematic patterns in open-ended responses in questions regarding these manipulative behaviors and to better understand the lived experiences of these participants.

Although previous regression analyses showed that only love bombing and jealousy induction were significant predictors of PTSD for individuals who had left the relationship, qualitative analyses were conducted to explore whether open-ended responses could yield more insight into PTSD-related symptomology for more covert emotional tactics. NVivo software was used to create coded analyses of hundreds of open-ended responses to questions regarding love bombing, jealousy induction, stonewalling and gaslighting. These analyses revealed a high level of aggression from partners and subsequent distress in most participants for all of these manipulation tactics across both groups of participants regardless of relationship duration. These tactics had distinct patterns and were coded on emerging themes based on frequency of the pattern.

After reading through responses for context, axial coding was used to create subcategories of reoccurring themes and events. In tandem, a simple analysis of word frequency was also conducted for tactics such as love bombing using NVivo software. The most common words featured in responses regarding love bombing included words such as *love, gifts, married, constantly, phone, flowers*. Other notably frequent words included *flattery, perfect, attention, pregnant, quickly, amazing, changed, stopped, followed by soulmate, texted/texting, abruptly, date, and move*.

Using the context of the open-ended responses, the frequency of these words were then connected to distinct patterns of love bombing that were coded consistently across participant reports. For example, many participants noted that their partners treated them to flowers, gifts, and vacations early on in the relationship. Participants also mentioned that their partners made the claim that they were “soul mates” and tended to mirror their personalities, interests and hobbies to win their trust. For some participants, their partner fast-forwarded physical intimacy, expressed love within a few weeks or dates, and moved quickly into cohabitation or marriage within months. Many participants also mentioned experiencing excessive praise and flattery in the relationship, such as compliments on physical appearance and intelligence. Participants also reported experiencing constant contact through phone calls, text messages, and dates.

In some participant reports, promises of the future – such as moving in together, marriage, and starting a family were also a part of the love bombing they experienced. A notable number of participants mentioned that there was a sudden and abrupt shift in the relationship which left them blindsided. This turning point often occurred during a relationship milestone such as moving in together, marriage, or pregnancy. Participants reported that this devaluation after a period of love bombing caused them overwhelming distress and a sense of betrayal and trauma.

For the method of jealousy induction, distinct patterns that emerged were: (1) manufacturing perceived competition (2) persistent contact with past partners (3) affairs and infidelity, (4) comparisons and comments about others meant to evoke jealousy or insecurity. Many participants commented on how their romantic partner kept in constant communication with ex-spouses, boyfriends and girlfriends despite their protests. Other

participants reported experiencing how their partners deliberately attempted to make them jealous by flirting with others in front of them. One example of manufacturing perceived competition was a participant who described how her partner flirted with others, stared longingly at women right in front of her, spoke about how many people desired him and reminisced frequently about past conquests. Similar examples of jealousy induction were described across participant reports.

A typical example of comparisons made includes a participant who reported that her partner idealized other women in front of her and told her she was deficient in comparison. The participant reported that her partner would objectify and flirted with others in front of her and would call her jealous and a prude when she voiced her concerns. Similar examples of comparisons followed by gaslighting and emotional invalidation were common among participant reports of jealousy induction. An example of affairs and infidelity includes reports of individuals who were cheated on during pregnancy, only to be labeled controlling or crazy when infidelity was discovered. This form of betrayal or other forms of devaluation such as emotional abuse during major milestones such as pregnancy, marriage, and cohabitation were common among participant reports.

For stonewalling and gaslighting tactics, romantic partners engaged in similar methods. Four main themes emerged during axial coded analyses: (1) Blameshifting and pathologizing their victims as “crazy.” (2) Rage and violence when held accountable. (3) Emotional invalidation. (4) Denial of one’s experiences and memory. One example of how aggressive gaslighting could be includes a participant who was physically attacked by her partner who claimed she had provoked him and was fearful of her. Although the

participant reported going to the emergency room with a serious injury, he later attempted to gaslight her into believing she had fallen instead of being pushed by him.

In stonewalling, romantic partners also engaged in the additional behaviors of expressing defensiveness during discussions, shutting down or giving the silent treatment, false apologies only to persist in abusive behaviors, accusations that participants were excessively bringing up the past, as well as yelling, cursing and abusive name-calling when participants attempted to have conversations with them about their behavior. An analysis of word frequency revealed that participant reports of stonewalling most frequently included words such as *accountability, deflect, ignore, past, confronted, lies, arguments, mean, anger, apologies, abused, rage, and defensive*. Overall, coded and thematic analyses revealed that many participants experienced exhaustion, distress, and anxiety due to stonewalling and gaslighting.

## Chapter IV

### Discussion

This study shows promising support for the hypothesis that narcissistic and psychopathic partner traits have a strong and positive association with PTSD symptoms related to the relationship, although these associations can be moderated by relationship duration as well as other variables which contributed to the variance of PTSD symptoms. Initial correlations revealed that psychopathy as well as specific subscales of grandiose narcissism such as manipulativeness, exploitativeness, entitlement, arrogance and lack of empathy had the largest significant correlations with PTSD symptomology. This establishes that psychopathy and certain facets of grandiose narcissism tend to be most correlated with PTSD symptoms. Further analysis demonstrated that those who had higher scores on grandiose narcissism, vulnerable narcissism and psychopathy significantly predicted a higher level of PTSD symptoms and that this model could explain 10% of the variance in PTSD symptoms, which makes sense in this self-selected population. This shows that co-occurring psychopathic and narcissistic traits could potentially compound the effect of PTSD symptoms and that both forms of personality traits are important to consider together when discussing the impact of romantic relationships with individuals who have these traits on PTSD.

Additional analysis revealed that even when other potentially mediating or moderating factors were accounted for, such as previous abuse like childhood abuse and

manipulative tactics, narcissism and psychopathy still remained unique and significant predictors for PTSD symptomology. Some of these effects could possibly interact with relationship status (whether or not the relationship had ended at the time of taking the survey).

### **Grandiose Narcissism, Vulnerable Narcissism and PTSD for Individuals Who Left the Relationship**

Specifically for individuals who had already left the romantic relationship, the study's findings show a strong relationship between both partner vulnerable and partner grandiose narcissism and PTSD symptomology, and this strong association remained even after accounting for previous abuse (including childhood abuse or abuse by a previous partner), abuse frequency and other forms of manipulation such as stonewalling, gaslighting and love bombing. Notably, grandiose narcissism and abuse frequency were more highly significantly associated with PTSD symptomology than vulnerable narcissism, and grandiose narcissism had the largest effect size. Grandiose narcissism remained the largest and most significant predictor of PTSD symptoms for those who had left the relationship, as most survey participants had. This makes sense given that earlier correlations revealed a strong relationship between PTSD symptomology and facets of grandiose narcissism specifically and grandiose narcissism has been associated with more overt features of aggression in the literature.

In addition, previous research has shown that the traits of grandiose narcissism make aggressors less susceptible to stress and exhibit higher levels of self-esteem (e.g. Papatgeorgiou et al., 2019). These partner traits combined with aggression are likely to have more of an impact on vulnerable victims of violence who may internalize their

partner's aggression and turn to self-blame when it comes from a more confident and ruthless aggressor. This is in line with the hypothesis that grandiose narcissism may have a stronger impact than vulnerable narcissism on the PTSD symptomology of individuals involved in such relationships due to the fact that grandiose narcissism is associated with the partner's lower internal emotional distress and higher self-esteem. Possibly romantic partners with grandiose narcissistic traits are more prone to lash out in rage, or to subject their partners to manipulation or abusive styles of relating without as much internal conflict, moral reservations, or inhibition, thus contributing to a higher level of PTSD symptomology in their partners. Interestingly, psychopathy did *not* remain a significant and unique predictor of PTSD for individuals who had left the relationship when other variables were controlled for, contradicting the hypothesis that psychopathy would also retain a significant association with PTSD symptoms. It did, however, remain a significant predictor for those who were still in the relationship.

The fact that abuse frequency, and to a smaller extent previous abuse, were also highly significant predictors makes sense given the wealth of literature connecting PTSD and intimate partner violence, as well as the literature regarding revictimization. It appears that even though grandiose narcissism on its own is the most significant predictor of PTSD for individuals who had left the relationship, the frequency of any type of abuse present can still contribute significantly. Previous abuse like childhood abuse is also predictive of post-traumatic symptoms for both those who had left the relationship and those who stayed, although it appears partner traits are more predictive of posttraumatic symptomology in both scenarios. This aligns with previous literature which indicates that polyvictimization can be a risk factor for developing PTSD, although it reveals that



partner traits themselves can be more impactful (e.g. Ford, 2021). It should be noted that physical abuse was also a significant predictor of PTSD for individuals who had left the relationship, albeit a smaller predictor. This finding builds on previous longitudinal research (e.g. Blasco-Ros et al., 2010) which showed that victims are more likely to escape from abusive situations when physical abuse is present rather than psychological abuse alone due to the fact that they are able to more readily identify what they are experiencing as abuse.

### **Love Bombing and Jealousy Induction for Individuals Who Left the Relationship**

The degree of love bombing, previous abuse, and jealousy induction had even smaller but still significant effects demonstrating that these factors also contribute to PTSD variance. It should be noted that there were significant positive correlations found between vulnerable and grandiose narcissism and psychopathy and love bombing, stonewalling and jealousy induction. This suggests that a higher degree of partner narcissism and partner psychopathy is correlated with more of these tactics, and that partner psychopathy and grandiose narcissism tend to be more correlated with these behaviors. This supports the findings of previous literature which suggests love bombing is associated with narcissistic self-enhancement and that grandiose narcissism and psychopathy are both associated with jealousy induction for the purpose of power of control (e.g. Masser et al., 2017; Tortoriello, 2017; Strutzenberg, 2017).

In many of the open-ended responses, participants expressed distress as they described the abrupt nature of love bombing followed by the shock of experiencing sudden devaluation that could contribute to PTSD symptomology. Open-ended responses regarding jealousy induction also expressed distress and the shock of betrayal, and these

descriptions aligned with research revealing narcissistic and psychopathic motives for power and control as partners often deliberately went out of their way to compare participants to perceived romantic suitors to manufacture insecurity and a sense of competition (e.g. Massar et al., 2017). The link between previous abuse and PTSD also makes sense given that there is a strong link between past abuse and revictimization in the literature, and even a connection between past PTSD symptoms and revictimization (e.g. Iverson, et al. 2013). The distress associated with jealousy induction and love bombing may also have important implications for how these tactics are designed to disorient yet further encourage appeasing and validation-seeking behaviors in victims of psychological abuse; these tactics may contribute to trauma bonding and should be explored in future research (e.g. Reid et al., 2013; Cantor & Price, 2007).

### **Psychopathy and PTSD in Individuals Still in the Relationship**

In contrast to individuals who had left the romantic relationship, individuals who were still in the romantic relationship did not have the traits of partner grandiose or vulnerable narcissism as significant predictors of their PTSD symptoms. For participants still in the relationship, only psychopathy and abuse frequency, as well as previous abuse to a smaller extent, remained unique and significant predictors of PTSD symptoms after other variables such as stonewalling, gaslighting, love bombing were accounted for. It is worth noting that abuse frequency was a larger significant predictor than psychopathy for individuals who were still in the relationship, indicating that abuse frequency was a more impactful contributor to PTSD symptoms than psychopathic traits on their own. However, this also suggests that having both partner psychopathic traits and a high level of abuse frequency may interact to produce a higher level of PTSD symptomology in

those who are still in relationships with individuals who have these traits. More research should be conducted to explore this possible interaction.

One possible explanation for this stark difference between individuals who had left the romantic relationship and those who stayed is that individuals who are still currently in the relationship may be experiencing psychopathic traits in a more salient, ongoing way than those who had already left the relationship due to the more overt, sadistic nature of these traits, and that they may spend more time in “survival mode” due to abuse frequency. They may have had less time to process the traumas of the relationship than those who had already left or had less therapeutic treatment for their trauma at the time of taking the survey. Therefore, they are either underestimating the levels of vulnerable and grandiose narcissism in their partners, have not yet processed more of the underhanded manipulation methods they have experienced or are simply not identifying them as a significant contributor to their symptoms at the time of taking the survey.

As noted previously, although significant effects were not found for any of the more covert manipulation methods for individuals who were still in the relationship, smaller and significant effects were found for love bombing, jealousy induction, and previous abuse for those who had left the relationship. Perhaps this is because individuals who have already left the relationship had more time and space to process the traumas or previous abuse they experienced or had exposure to therapeutic treatment which allowed them to identify such tactics and previous abuse as impactful. This could have enabled them to identify examples of more covert forms of manipulation such as love bombing and jealousy induction once they were no longer in a life-threatening situation, since this

group was also more likely to have reported experiencing physical abuse. It may be that certain traits and manipulative behaviors become more, or less, impactful on PTSD symptoms depending on whether the individual exits the relationship. Given that some research indicates that PTSD symptom clusters can decline over time and certain clusters can evolve differently than others, we may be viewing these two subsamples as two different “stages” of the journey and seeing how the development of PTSD differs from one stage to the next (Goodman-Williams & Uleman, 2019). This provides some support for the hypothesis that more covert manipulation methods can contribute to PTSD symptomology in the aftermath of such a relationship once someone has exited the relationship, although it also reveals that these behaviors may not play as large of a role in producing symptoms as narcissistic or psychopathic traits themselves which were larger predictors for those no longer in the relationship.

### **Gaslighting, Stonewalling and PTSD**

Contrary to the hypothesis that stonewalling or gaslighting would significantly contribute to the variance in PTSD symptoms, no significant effects were found for stonewalling or gaslighting for those who had left the relationship or those who stayed. Correlational analyses also revealed that partner narcissistic and partner psychopathic traits did not have significant correlations with gaslighting apart from grandiose narcissism, although stonewalling did have significant correlations with all partner traits. However, this does not mean that gaslighting has no impact on partner traits or PTSD symptomology. This could be due in part to the fact that the population studied is a self-selected population where the majority of participants have experienced intimate partner

violence and gaslighting. Thus there may be less variance in the population and more significant associations may be found in a population with more variance.

In addition, many of the more open-ended qualitative responses regarding gaslighting and stonewalling still seem to indicate a high amount of PTSD-related emotional distress for survey participants in the aftermath, as survey participants relayed experiencing rageful outbursts, yelling, cursing, callous silent treatments and accusations of their victims being mentally ill when they were held accountable for their behavior. These gaslighting and stonewalling behaviors are commonly the ones associated with antisocial and narcissistic traits in the literature (e.g. Miano, 2021). It may be that the Likert-scale gaslighting question simply did not capture this emotional distress in the ways that the questions regarding jealousy induction or love bombing did, as gaslighting and stonewalling may have more complex facets to explore. These tactics may still contribute to subthreshold PTSD symptoms, and the impact of these tactics may be better measured by examining the open-ended qualitative responses survey participants gave instead.

### **Gender Differences, Partner Traits and PTSD**

The study found no significant interaction effects between gender and vulnerable narcissism or gender and psychopathy for PTSD symptoms, contrary to the hypothesis that women would experience a greater number of PTSD symptoms given the additional sociocultural factors that contribute to their stress. However, it did find a significantly positive association between grandiose narcissism and PTSD for both males and females, with a stronger relationship of grandiose narcissism and PTSD symptomology for males. One theory of why that may be lies in socialization differences. This gender difference

may have to do with the fact that women on average are socialized to be more modest and less forthcoming about the pursuit of power or fantasies about success. As a result, experiencing grandiosity and an inflated sense of self from women with narcissistic traits may go against social norms in a way that is especially disorienting for male partners, thus affecting PTSD scores. Since the majority of participants in this study were female, more research is needed on male participants who report experiencing romantic relationships with female partners with narcissistic and psychopathic traits to better understand these effects.

### **PTSD Symptom Clusters, Narcissism and Psychopathy**

The study also investigated which facets of PTSD were most predicted by partner grandiose and vulnerable narcissism as well as psychopathy. It predicted that certain dimensions of PTSD such as avoidance and arousal would be more strongly and significantly associated with grandiose narcissism and psychopathy specifically due to the more overtly aggressive nature of these traits, and that intrusion and changes in cognition and mood would be associated with vulnerable narcissism with a similar effect for grandiose narcissism.

Initial correlation analyses showed that when PTSD symptoms were broken down into four categories of intrusion/re-experiencing, avoidance, changes in cognition and mood and arousal for analyses, PTSD intrusion symptoms had the highest level of positive, significant correlations with partner grandiose narcissism and partner psychopathy compared to partner vulnerable narcissism for the overall sample of participants. Grandiose narcissism specifically had the highest correlation with PTSD intrusion symptoms. This makes sense as grandiose narcissism and psychopathy share

more features than vulnerable narcissism and psychopathy, such as grandiosity, duplicity, proactive callousness, and more instances of unprovoked, at times instrumental aggression (e.g. Schoenleber et al., 2011).

As hypothesized, the PTSD symptom dimension of arousal and reactivity had the highest correlations with psychopathy, although vulnerable and grandiose narcissism also had lower but similarly sized correlations. At first glance this correlation makes sense, given that psychopathic traits contain more callous-unemotional traits, as well as more of a propensity for sadism and violence. Such characteristics would likely be correlated with more of a fight or flight response in individuals who have been in intimate relationships with psychopathic individuals, associated with an increase in symptoms like hypervigilance as a protective mechanism to ward off potential attacks, as well as intrusion/re-experiencing of traumatic memories of these attacks.

Correlational evidence does not necessarily imply a causal relationship, however, and indeed later regression analyses revealed that grandiose narcissism was the strongest predictor of intrusion, avoidance, and changes in mood and cognition symptoms. Potential explanations are discussed further below.

### **Regressions for PTSD Symptom Clusters, Narcissism and Psychopathy**

Regression analyses revealed that the model as a whole - including partner vulnerable and partner grandiose narcissism and partner psychopathy - contributed a substantial amount of variance to PTSD intrusion and avoidance symptoms specifically and did not contribute much variance to PTSD hyperarousal or changes in mood and cognition. This indicates that PTSD intrusion and avoidance symptoms are the facets of PTSD most significantly predicted by partner vulnerable narcissism, partner grandiose

narcissism and partner psychopathy. For PTSD intrusion symptoms, it was grandiose and vulnerable narcissism that were more highly significant than psychopathy as predictors, although psychopathy was still significant. This suggests that although all three types of personality traits are important to the prediction of PTSD intrusion, both facets of narcissism seem to be a greater predictor than psychopathy for the dimension of PTSD intrusion.

This supports the hypothesis that grandiose narcissism would be most highly associated with PTSD intrusion symptoms but contradicts the hypothesis that psychopathy would have one of the strongest associations with PTSD intrusion symptoms. It may be that because psychopathy has more callous-unemotional traits, this also comes with more indifference and less effort exerted in trying to belittle a romantic partner. Perhaps the hypersensitivity of vulnerable narcissistic traits and the overinflated, contemptuous overt nature of grandiose narcissistic traits have a more significant impact on whether an individual experiences flashbacks, memories, and nightmares of traumatizing events in the relationship. This finding may also be connected to past studies that link vulnerable narcissism and narcissistic rage, since vulnerable narcissism was found to be associated with hostility and aggression as well as less self-control over anger in previous research; it's possible that the impact of narcissistic rage plays a role in why participants experience intrusive symptoms (e.g. Krizan & Johar, 2015).

For PTSD avoidance symptoms, grandiose narcissism had the largest effect size and was highly significant, followed by a highly significant effect of vulnerable narcissism, and a weaker effect of psychopathy. Since avoidance symptoms involve avoiding both internal and external reminders or triggers of the traumatic event, perhaps



psychopathy involves greater potential for physical violence and sadism and thus more life-threatening considerations. It is possible that psychopathy had a slightly less significant impact on PTSD avoidance symptoms specifically because individuals cannot afford to avoid such reminders if they want to survive a relationship with someone high in psychopathic traits – they would want to remember the triggers and stimuli associated with the potential threat while it was still immediate. Future research should test this and other possibilities.

Both facets of narcissism significantly predicted PTSD changes in cognition and mood, although grandiose narcissism was the strongest predictor and vulnerable narcissism had a weaker effect size; partner psychopathy, however, was not a significant predictor for PTSD changes in cognition and mood. This was a bit surprising, given that partner psychopathic traits are likely to be outwardly aggressive and might be assumed to produce changes such as distancing from others or self-blame. Possibly, changes in mood and cognition take place over a longer period of time while intrusion and avoidance symptoms are more immediate. For example, an individual in this type of romantic relationship with someone who is psychopathic may immediately experience intrusive thoughts due to the outwardly aggressive nature of these traits and possible physical abuse, but only come to experience anhedonia later on after a period of chronic abuse. In terms of grandiose narcissism having a larger impact than either vulnerable narcissism or psychopathy on changes in cognition and mood, this does contradict the hypothesis that vulnerable narcissism would be more associated with changes in cognition and mood. This may be because grandiose narcissism is associated with an inflated self-concept, grandiose ideas, and entitlement. When such an inflated sense of self is expressed

chronically to a romantic partner and perhaps expressed more frequently in the form of blameshifting, it may cause the romantic partner to experience more impactful changes in the way they think about themselves and the world, leading to higher degrees of self-blame for example.

Finally, vulnerable narcissism, grandiose narcissism and psychopathy were notably significant (but weak) predictors of arousal and reactivity PTSD symptoms. Interestingly, contrary to what was hypothesized, it was vulnerable narcissism, not grandiose narcissism or psychopathy, which had a slightly larger effect size and was a more significant predictor of PTSD arousal and reactivity symptoms. Vulnerable narcissism is associated with lower self-esteem, introversion, and hypersensitivity. As mentioned previously, it may be because vulnerable narcissistic traits are associated with more potential “lashing out” behaviors and narcissistic rage that such traits create a more significant impact on PTSD arousal symptoms in individuals specifically (e.g. Krizan & Johar, 2015). Hypersensitive behaviors such as lashing out may cause maladaptive changes in symptoms such as heightened startle response, hypervigilance, and overall alertness and watchfulness (what has been colloquially termed as “walking on eggshells”) for when the romantic partner may engage in rage attacks or react arbitrarily to perceived slights. These analyses have important implications for future research to explore how and why certain facets of PTSD are more predicted by certain facets of partner narcissism or partner psychopathy.

### **Limitations and future directions**

There are several limitations to this study. This research relied on the self-report for PTSD and partner levels of narcissism and psychopathy, which can have some bias,

based on one's personal viewpoints and emotional experience of the relationship. However, previous research has indicated that self-reports from loved ones of narcissistic individuals using informant scales can be more aligned with expert diagnoses than individual self-ratings, so these reports still provide valuable information about partner traits (e.g. Miller et al., 2005; Carlson et al., 2013). Survey participants were also recruited online, which can omit individuals who have had experiences with narcissistic or psychopathic individuals but may not be active in online communities centered around mental health. It may also exclude individuals who do not wish to take surveys of a sensitive nature or opted out of the study early due to trauma-related questions.

Revictimization and cumulative trauma can also affect posttraumatic symptomology (e.g. Pereira et al., 2020; Widom et al., 2008; Mouzos & Makkai, 2004). This study, however, did take many of these variables into account when performing regression analyses, and found that narcissistic and psychopathic traits remained larger, significant and unique predictors even when previous abuse such as childhood abuse or abuse by previous romantic partners was accounted for, although what kind of traits contributed significantly to PTSD symptomology appeared to be affected by relationship status at the time of taking the survey. In addition, participants were asked to report on a partner with the *most* narcissistic and psychopathic traits which may omit the full extent of how previous relationship histories contribute to PTSD symptoms; while the survey did ask survey participants to report incidents of previous abuse, it did not include an extensive questionnaire on these previous relationships.

While participants reported partner characteristics on reliable and valid scales measuring narcissistic and psychopathic traits, this does not necessarily mean that the

partners in question have a full-fledged personality disorder nor have their partners necessarily been diagnosed by a clinician. The results may thus not be generalizable to those in relationships with those who have been clinically diagnosed with Narcissistic Personality Disorder, Antisocial Personality Disorder or clinically diagnosed psychopathy. However, the results may still be helpful and generalizable to those who have been in relationships with individuals who have the traits associated with narcissism and psychopathy.

### **Conclusion**

The results of the study provide some of the first empirical findings to support the hypothesis that both vulnerable and grandiose narcissism and psychopathy can significantly and uniquely contribute to PTSD symptomology related to the relationship. It provides evidence that these partner traits are unique and significant predictors of posttraumatic symptomology even in the presence of previous abuse or childhood abuse indicating revictimization, physical abuse, and manipulative behaviors associated with these traits. For those who had left the romantic relationship, grandiose narcissism and vulnerable narcissism remained the largest predictors of posttraumatic symptomology. For those who were still in the relationship, psychopathy and abuse frequency were the largest predictors of posttraumatic symptomology. This study also revealed that these partner traits are most predictive of PTSD intrusion and avoidance symptoms specifically, and that grandiose narcissism specifically is most predictive of most PTSD symptom clusters. This study also provides preliminary support for significant correlations between manipulative behaviors such as jealousy induction and love bombing with narcissistic and psychopathic traits, and indicates that these are also smaller and unique predictors of posttraumatic

symptomology. Future research should explore how and why certain PTSD dimensions are affected differentially by partner grandiose and vulnerable narcissism and partner psychopathy.

## References

- Adams, H., Luevano, V., & Jonason, P. (2014). Risky business: Willingness to be caught in an extra-pair relationship, relationship experience, and the Dark Triad. *Personality and Individual Differences*, 66, 204-207
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.).
- Arias, I., & Pape, K. T. (1999). Psychological abuse: implications for adjustment and commitment to leave violent partners. *Violence and victims*, 14(1), 55–67.
- Back, M. D., Schmukle, S. C., & Egloff, B. (2010). Why are narcissists so charming at first sight? Decoding the narcissism-popularity link at zero acquaintance. *Journal of personality and social psychology*, 98(1), 132–145.  
<https://doi.org/10.1037/a0016338>
- Beaudette, J. (2012). *Backstabbing bosses and callous co-workers: A mixed methods examination of working with a psychopath*. Master's Thesis. Department of Psychology, Carleton University. Ottawa, Canada.
- Beck, J. G., McNiff, J., Clapp, J.D., Olsen, S.A., Avery, M.L., & Hagewood, J.H. (2011). Exploring Negative Emotion in Women Experiencing Intimate Partner Violence: Shame, Guilt, and PTSD. *Behavior Therapy*, 42(4), 740-750.
- Blair, R. (2007). The amygdala and ventromedial prefrontal cortex in morality and psychopathy. *Trends in Cognitive Sciences*, 11(9), 387-392.
- Blair J. (2010). Psychopathy, frustration, and reactive aggression: The role of ventromedial prefrontal cortex. *British Journal of Psychology*, 101(3), 383-399.  
doi:10.1348/000712609x418480
- Birbaumer, N., Viet, R., Lotze, M., Erb, M., Hermann, C., Grodd, W., et al. (2005). Deficient fear conditioning in psychopathy: A functional magnetic resonance imaging study. *Archives of General Psychiatry*, 62(7), 799–805.
- Blinkhorn, V., Lyons, M., & Almond, L.. (2016). Drop the bad attitude! Narcissism predicts acceptance of violent behavior. *Personality and Individual Differences*, 98, 157-161.
- Blasco-Ros, Concepción, Sánchez-Lorente, Segunda, & Martínez, Manuela. (2010). Recovery from depressive symptoms, state anxiety and post-traumatic stress disorder in women exposed to physical and psychological, but not to psychological intimate partner violence alone: A longitudinal study. *BMC Psychiatry*, 10(1), 98.

- Bovin, M., Marx, B., Weathers, F., Gallagher, M., Rodriguez, P., Schnurr, P., & Keane, T. (2016). Psychometric Properties of the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (PCL-5) in Veterans. *Psychological Assessment*, 28(11), 1379-1391.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101.
- Bremner, J. D. (2003). Long-term effects of childhood abuse on brain and neurobiology. *Child and Adolescent Psychiatric Clinics of North America*, 12(2), 271–292. [https://doi.org/10.1016/S1056-4993\(02\)00098-6](https://doi.org/10.1016/S1056-4993(02)00098-6)
- Brown, & Seals, J. (2019). Intimate partner problems and suicide: are we missing the violence? *Journal of Injury and Violence Research*, 11(1), 53–64. <https://doi.org/10.5249/jivr.v11i1.997>
- Brignone, Sorrentino, A. E., Roberts, C. B., & Dichter, M. E. (2018). Suicidal ideation and behaviors among women veterans with recent exposure to intimate partner violence. *General Hospital Psychiatry*, 55, 60–64. <https://doi.org/10.1016/j.genhosppsych.2018.10.006>
- Byrne, J. S., & O'Brien, E. J. (2014). Interpersonal views of narcissism and authentic high self-esteem: it is not all about you. *Psychological reports*, 115(1), 243–260. <https://doi.org/10.2466/21.09.PR0.115c15z9>
- Busch, K. A., Fawcett, J., & Jacobs, D. G. (2003). Clinical correlates of inpatient suicide. *The Journal of clinical psychiatry*, 64(1), 14–19. <https://doi.org/10.4088/jcp.v64n0105>
- Byrne, J. S., & O'Brien, E. J. (2014). Interpersonal views of narcissism and authentic high self-esteem: It is not all about you. *Psychological Reports*, 115, 243–260.
- Cacioppo, S., & Cacioppo, J. (2016). Research in Social Neuroscience: How Perceived Social Isolation, Ostracism, and Romantic Rejection Affect Our Brain. In *Social Exclusion* (pp. 73-88). Cham: Springer International Publishing.
- Campbell, W., Keith, F., Craig A., & Finkel, E.J. (2002). Does self-love lead to love for others? A story of narcissistic game playing. *Journal of Personality and Social Psychology*, 83(2), 340-354.
- Cantor, C., & Price, J. (2007). Traumatic entrapment, appeasement and complex post-traumatic stress disorder: Evolutionary perspectives of hostage reactions, domestic abuse and the Stockholm syndrome. *Australasian Psychiatry: Bulletin of the Royal Australian and New Zealand College of Psychiatrists*, 41(5), 377-384.
- Carlson, E. N., Vazire, S., & Oltmanns, T. F. (2013). Self–other knowledge asymmetries in personality pathology. *Journal of Personality*, 81, 155–170. <http://dx.doi.org/10.1111/j.1467-6494.2012.00794.x>

- Carnes, P. P. (2019). *Betrayal Bond: Breaking Free of Exploitive Relationships*. Health Communications, Incorporated.
- Carton, H., & Egan, V. (2017). The dark triad and intimate partner violence. *Personality and Individual Differences, 105*, 84-88.
- Cascio, C.N., Konrath, S.H., & Falk, E.B. (2015). Narcissists' social pain seen only in the brain. *Social Cognitive and Affective Neuroscience, 10*(3), 335-341.
- Caiozzo, C.N., Houston, J., & Grych, J. (2016). Predicting aggression in late adolescent romantic relationships: A short-term longitudinal study. *Journal of Adolescence, 53*, 237-248.
- Chester, D.S., & DeWall, C. N. (2016). Sound the Alarm: The Effect of Narcissism on Retaliatory Aggression Is Moderated by dACC Reactivity to Rejection. *Journal of Personality, 84*(3), 361-368.
- Coccaro, E. F., McCloskey, M. S., Fitzgerald, D. A., & Phan, K. L. (2007). Amygdala and Orbitofrontal Reactivity to Social Threat in Individuals with Impulsive Aggression. *Biological Psychiatry, 62*(2), 168-178.  
doi:10.1016/j.biopsych.2006.08.024
- Craig, R.J. (2003). Use of the Millon Clinical Multiaxial Inventory in the psychological assessment of domestic violence: A review. *Aggression and Violent Behavior, 8*(3), 235-243.
- Crofford, L. J. (2007). Violence, Stress, and Somatic Syndromes. *Trauma, Violence, & Abuse, 8*(3), 299–313. <https://doi.org/10.1177/1524838007303196>
- Day, N., Bourke, M., Townsend, M., & Grenyer, B. (2020). Pathological Narcissism: A Study of Burden on Partners and Family. *Journal of Personality Disorders 34*(6), 799-813.
- Decety, J., Chen, C., Harenski, C., & Kiehl, K.A. (2013). An fMRI study of affective perspective taking in individuals with psychopathy: Imagining another in pain does not evoke empathy. *Frontiers in Human Neuroscience, 7*, 489.
- Diez, C., Kurland, R.P, Rothman, E.F, Bair-Merritt, M., Fleegler, E., Xuan, Z., . . . Siegel, Michael. (2017). State Intimate Partner Violence-Related Firearm Laws and Intimate Partner Homicide Rates in the United States, 1991 to 2015. *Annals of Internal Medicine, 167*(8), 536-543.
- Devries, K. M., Mak, J. Y., Bacchus, L. J., Child, J. C., Falder, G., Petzold, M., Astbury, J., & Watts, C. H. (2013). Intimate partner violence and incident depressive symptoms and suicide attempts: a systematic review of longitudinal studies. *PLoS medicine, 10*(5), e1001439. <https://doi.org/10.1371/journal.pmed.1001439>



- Dufner, M., Denissen, J., Van Zalk, M., Matthes, B., Meeus, W., Van Aken, M., & Sedikides, C. (2012). Positive Intelligence Illusions: On the Relation Between Intellectual Self-Enhancement and Psychological Adjustment. *Journal of Personality, 80*(3), 537-572.
- Dutton, M. A., Goodman, L. A., & Bennett, L. (1999). Court-involved battered women's responses to violence: the role of psychological, physical, and sexual abuse. *Violence and victims, 14*(1), 89–104.
- Dutton, M. A., Green, B. L., Kaltman, S. I., Roesch, D. M., Zeffiro, T. A., & Krause, E. D. (2006). Intimate Partner Violence, PTSD, and Adverse Health Outcomes. *Journal of Interpersonal Violence, 21*(7), 955–968.  
<https://doi.org/10.1177/0886260506289178>
- Dutton, D., & Painter, S. (1993). Emotional Attachments in Abusive Relationships: A Test of Traumatic Bonding Theory. *Violence and Victims, 8*(2), 105-120.
- Feng, C., Yuan, J., Geng, H., Gu, R., Zhou, H., Wu, X., & Luo, Y. (2018). Individualized prediction of trait narcissism from whole-brain resting-state functional connectivity. *Human brain mapping, 39*(9), 3701–3712.  
<https://doi.org/10.1002/hbm.24205>
- Fernández-Suárez, A. Pérez, B. Herrero, J. Juarros-Basterretxea, J. & Javier Rodríguez-Díaz, F. (2018). The role of psychopathic traits among intimate partner-violent men: A systematic review. *Revista Iberoamericana De Psicología Y Salud, 9*(2), 84.
- Follingstad, D., Coyne, S., & Gambone, L. (2005). A Representative Measure of Psychological Aggression and Its Severity. *Violence and Victims, 20*(1), 25-38.
- Ford, J.D, van der Kolk, B., Herman, J.L., & Courtois, C.A. (2020). *Treating Complex Traumatic Stress Disorders in Adults: Scientific Foundations and Therapeutic Models* (2nd ed.). Guilford Press.
- Ford J. D. (2021). Polyvictimization and developmental trauma in childhood. *European Journal of Psychotraumatology, 12*(Suppl ), 1866394.  
<https://doi.org/10.1080/20008198.2020.1866394>
- Gewirtz-Meydan, Ateret, & Finzi-Dottan, Ricky. (2018). Narcissism and Relationship Satisfaction from a Dyadic Perspective: The Mediating Role of Psychological Aggression. *Marriage & Family Review, 54*(3), 296-312.
- Godfrey, D.A., Kehoe, C.M., Bennett, V. E, Bastardas-Albero, A., & Babcock, J.C. (2021). Validating measures of emotional abuse with behavioral observations during interpersonal conflict. *Journal of Social and Personal Relationships, 38*(1), 3-18.

- Goldner-Vukov, M., & Moore, L. (2010). Malignant Narcissism: From Fairy Tales to Harsh Reality. *Psychiatria Danubina*, 22(3), 392-405.
- Goodman-Williams, R., & Ullman, S. (2019). Posttraumatic Stress Disorder and Measurement Invariance in a Sample of Sexual Assault Survivors: Are Symptom Clusters Stable Over Time? *Psychological Trauma*, 12(4), 389-396.
- Gottman, J., & Silver, N. (1999). The seven principles for making marriage work. New York, NY: Crown Publishers.
- Glenn, A. L., & Raine, A. (2009). Psychopathy and instrumental aggression: Evolutionary, neurobiological, and legal perspectives. *International Journal of Law and Psychiatry*, 32(4), 253-258. doi:10.1016/j.ijlp.2009.04.002
- Glenn, A. L., Raine, A., & Schug, R. A. (2009). The neural correlates of moral decision-making in psychopathy. *Molecular Psychiatry*, 14, 5–6.
- Glenn, A. L., Raine, A., Yaralian, P. S., & Yang, Y. (2010). Increased Volume of the Striatum in Psychopathic Individuals. *Biological Psychiatry*, 67(1), 52–58. doi.org/10.1016/j.biopsych.2009.06.018
- Green, A. & Charles, K. (2019). Voicing the Victims of Narcissistic Partners: A Qualitative Analysis of Responses to Narcissistic Injury and Self-Esteem Regulation. *SAGE Open*, 9(2), 215824401984669.
- Hare, R. D. (2012). Hare Psychopathy Checklist-Revised. PsycTESTS Dataset. doi.org/10.1037/t04993-000
- Hare, R. D. 1999. *Without Conscience: The Disturbing World of the Psychopaths Among Us*. New York: Guilford.
- Hare, R. D., & Neumann, C. S. (2005). Structural models of psychopathy. *Current Psychiatry Reports*, 7, 57–64.
- Harenski, C. L., Harenski, K. A., Shane, M. S., & Kiehl, K. A. (2010). Aberrant neural processing of moral violations in criminal psychopaths. *Journal of Abnormal Psychology*, 119(4), 863–874.
- Hart, W., Adams, J. M., & Tortoriello, G. (2017). Narcissistic responses to provocation: An examination of the rage and threatened-egotism accounts. *Personality and Individual Differences*, 106, 152–156. <http://dx.doi.org/10.1016/j.paid.2016.10.049>.
- Haslam C, Montrose VT (2015). Should have known better: The impact of mating experience and the desire for marriage upon attraction to the narcissistic personality. *Personality and Individual Differences*, 188-192.

- Herpertz C., Dietrich, T. M., Wenning, B., Krings, T., Erberich, S. G., Willmes, K., . . . Sass, H. (2001). Evidence of abnormal amygdala functioning in borderline personality disorder: A functional MRI study. *Biological Psychiatry*, *50*(4), 292-298. doi:10.1016/s0006-3223(01)01075-7
- Hooley, J. M. (2017). *Abnormal psychology*. Pearson.
- Horan, Sean M, Guinn, Trey D, & Banghart, Scott. (2015). Understanding Relationships Among the Dark Triad Personality Profile and Romantic Partners' Conflict Communication. *Communication Quarterly*, *63*(2), 156-170.
- Humeny, C., Forth, A., & Logan, J. (2021). Psychopathic traits predict survivors' experiences of domestic abuse. *Personality and Individual Differences*, *171*.
- Inslicht, Sabra S., Marmar, C. R., Neylan, T.C., Metzler, T. J., Hart, S.L, Otte, C., . . . Baum, A. (2006). Increased cortisol in women with intimate partner violence-related posttraumatic stress disorder. *Psychoneuroendocrinology*, *31*(7), 825-838.
- Iverson, K., Litwack, S., Pineles, S., Suvak, M., Vaughn, R., & Resick, P. (2013). Predictors of Intimate Partner Violence Revictimization: The Relative Impact of Distinct PTSD Symptoms, Dissociation, and Coping Strategies. *Journal of Traumatic Stress*, *26*(1), 102-110.
- Jauk, E., Benedek, M., Koschutnig, K., Kedia, G., & Neubauer, A. C. (2017). Self-viewing is associated with negative affect rather than reward in highly narcissistic men: An fMRI study. *Scientific Reports*, *7*(1), 5804-8.
- Jauk, E., Ulbrich, L., Jorschick, P., Hoefler, M., Kaufman, S., & Kanske, P. (2022). The nonlinear association between grandiose and vulnerable narcissism: An individual data meta-analysis. *Journal of Personality*.
- Kiehl, K. A., Smith, A. M., Hare, R. D., Mendrek, A., Forster, B. B., & Brink, J. (2001). Limbic abnormalities in affective processing by criminal psychopaths as revealed by functional magnetic resonance imaging. *Biological Psychiatry*, *50*, 677-684.
- Kilpatrick, D., Resnick, H., Milanak, M., Miller, M., Keyes, K., & Friedman, M. (2013). National Estimates of Exposure to Traumatic Events and PTSD Prevalence Using DSM-IV and DSM-5 Criteria. *Journal of Traumatic Stress*, *26*(5), 537-547.
- Kjærøvik, S. L., & Bushman, B. J. (2021). The link between narcissism and aggression: A meta-analytic review. *Psychological Bulletin*. Advance online publication. <https://doi.org/10.1037/bul0000323>
- Koenen, K., Ratanatharathorn, A., Ng, L., McLaughlin, K., Bromet, E., Stein, D., . . . Kessler, R. (2017). Posttraumatic stress disorder in the World Mental Health Surveys. *Psychological Medicine*, *47*(13), 2260-2274.

- Krizan, Z., & Herlache, A. D. (2018). The Narcissism Spectrum Model: A Synthetic View of Narcissistic Personality. *Personality and Social Psychology Review*, 22(1), 3–31. <https://doi.org/10.1177/1088868316685018>
- Krizan, Z., & Johar, O. (2015). Narcissistic Rage Revisited. *Journal of Personality and Social Psychology*, 108(5), 784-801.
- Lagdon, S., Miller, J. D., & Campbell, W. K. (2008). Comparing clinical and Social-Personality conceptualizations of narcissism. *Journal of Personality*, 76(3), 449-476. doi:10.1111/j.1467-6494.2008.00492.x
- Lagdon, S., Armour, C., & Stringer, M. (2014). Adult experience of mental health outcomes as a result of intimate partner violence victimisation: A systematic review. *European Journal of Psychotraumatology*, 5(1), 24794-Article 24794.
- Lamkin, J., Lavner, J.A., & Shaffer, A. (2017). Narcissism and observed communication in couples. *Personality and Individual Differences*, 105, 224.
- Lange, J, Paulhus, D.L, & Crusius, J. (2018). Elucidating the dark side of envy: Distinctive links of benign and malicious envy with dark personalities. *Personality & Social Psychology Bulletin*, 44(4), 601-614.
- Lange J., Crusius J., Hagemeyer B. (2016). The Evil Queen’s dilemma: Linking narcissistic admiration and rivalry to benign and malicious envy. *European Journal of Personality*, 30, 168-188. doi:10.1002/per.2047
- Leedom, Liane J, Andersen, Donna, Glynn, Mary Ann, & Barone, Meredith L. (2019). Counseling Intimate Partner Abuse Survivors: Effective and Ineffective Interventions. *Journal of Counseling and Development*, 97(4), 364-375.
- Lilienfeld, S., & Widows, M. (2005). *Professional Manual for the Psychopathic Personality Inventory-Revised (PPI-R)*. Lutz, Florida: Psychological Assessment Resources.
- Lotze, M., Veit, R., Anders, S., & Birbaumer, N. (2007). Evidence for a different role of the ventral and dorsal medial prefrontal cortex for social reactive aggression: An interactive fMRI study. *NeuroImage*, 34(1), 470-478. doi:10.1016/j.neuroimage.2006.09.028
- Lorber, M. F. 2004. “Psychophysiology of aggression, psychopathy, and conduct problems: A meta-analysis.” *Psychological Bulletin*, 130 (4):531–52.
- Lykken, D. 1957. “A study of anxiety in the sociopathic personality.” *Journal of Abnormal and Social Psychology*, 55, 6–10.
- Miller, J. D., McCain, J., Lynam, D. R., Few, L. R., Gentile, B., MacKillop, J., & Campbell, W. K. (2014). A comparison of the criterion validity of popular measures of narcissism and narcissistic personality disorder via the use of expert

ratings. *Psychological Assessment*, 26, 958–969. <http://dx.doi.org/10.1037/a0036613>

- Marshall, Amy D, Panuzio, Jillian, & Taft, Casey T. (2005). Intimate partner violence among military veterans and active-duty servicemen. *Clinical Psychology Review*, 25(7), 862-876.
- Massar, K., Winters, C. L., Lenz, S., & Jonason, P. K. (2017). Green-eyed snakes: The association between psychopathy, jealousy, and jealousy induction. *Personality and Individual Differences*. <http://dx.doi.org/10.1016/j.paid.2016.01.055>.
- Mechanic, Mindy B, Weaver, Terri L, & Resick, Patricia A. (2008). Mental Health Consequences of Intimate Partner Abuse. *Violence against Women*, 14(6), 634-654.
- Meier. (2004). *Exploring Narcissism in a Group of Male Batterers*. [Doctoral Dissertation]. University of Kentucky.
- Miano, P., Bellomare, M., & Genova, V. (2021). Personality correlates of gaslighting behaviours in young adults. *The Journal of Sexual Aggression*, 27(3), 285-298.
- Miller, J. D., Campbell, W. K., & Pilkonis, P. A. (2007). Narcissistic personality disorder: Relations with distress and functional impairment. *Comprehensive Psychiatry*, 48(2), 170–177. <https://doi.org/10.1016/j.comppsy.2006.10.003>
- Moeller J., Crocker, J., & Bushman, B. J. (2009). Creating hostility and conflict: Effects of entitlement and self-image goals. *Journal of Experimental Social Psychology*, 45(2), 448- 452. doi:10.1016/j.jesp.2008.11.005
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, 12(4), 177– 196.
- Mouzos, J., & Makkai, T. (2004). *Women's Experiences of Male Violence: Findings from the Australian Component of the International Violence against Women Survey (IVAWS)*.
- Naved, Ruchira Tabassum, MS, PhD, & Akhtar, Nazneen, MS. (2008). Spousal Violence Against Women and Suicidal Ideation in Bangladesh. *Women's Health Issues*, 18(6), 442-452.
- Neal, T., & Sellbom, M. (2012). Examining the factor structure of the Hare Self-Report Psychopathy Scale. *Journal of Personality Assessment*, 94, 244-253.
- Oltmanns, J., Crego, C., & Widiger, T. (2018). Informant Assessment: The Informant Five-Factor Narcissism Inventory. *Psychological Assessment*, 30(1), 31-42.

- Paulhus, D. L. (1998). Interpersonal and intrapsychic adaptiveness of trait self-enhancement: A mixed blessing? *Journal of Personality and Social Psychology*, 74(5), 1197–1208. <https://doi.org/10.1037/0022-3514.74.5.1197>
- Paulhus, D., Hemphill, J., & Hare, R. (2016). *Manual for the Self-Report Psychopathy scale- III*. Toronto: Multi-Health Systems.
- Paulhus, D., & Williams, K. (2002). The Dark Triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36, 556-568.
- Patrick, C. J., M. M. Bradley, and P. J. Lang. 1993. “Emotion in the criminal psychopath: Startle reflex modulation.” *Journal of Abnormal Psychology*, 102, 82–92.
- Pagliaro, M. (2009). *Survivors of Psychopaths: An Investigation of Victimization Experiences, Coping, and Social Support*. Dissertation. Department of Psychology, Carleton University. Ottawa, Canada.
- Papageorgiou, K.A., Gianniou, F., Wilson, P., Moneta, Giovanni B.B., Delfina, & Clough, P.J.,. (2019). The bright side of dark: Exploring the positive effect of narcissism on perceived stress through mental toughness. *Personality and Individual Differences*, 139, 116-124.
- Papp, L., Kouros, C., & Cummings, E. (2009). Demand-withdraw patterns in marital conflict in the home. *Personal Relationships*, 16(2), 285-300.
- Pereira, Miguel Esteves, Azeredo, Andreia, Moreira, Diana, Brandão, Isabel, & Almeida, Fernando. (2020). Personality characteristics of victims of intimate partner violence: A systematic review. *Aggression and Violent Behavior*, 52, 101423.
- Pinto, R.J., Correia-Santos, P., Costa-Leite, J., Levendosky, A.A., Jongenelen, I., 2016. Cortisol awakening response among women exposed to intimate partner violence. *Psychoneuroendocrinology*, 74, 57–64. <https://doi.org/10.1016/j.psyneuen.2016.08.024>.
- Ponti, L., Ghinassi, S., & Tani, F. (2019). The Role of Vulnerable and Grandiose Narcissism in Psychological Perpetrated Abuse Within Couple Relationships: The Mediating Role of Romantic Jealousy. *The Journal of Psychology*, 154(2), 144-158. doi:10.1080/00223980.2019.1679069
- Porter, S. (1996). Without conscience or without active conscience? The etiology of psychopathy revisited. *Aggression and Violent Behavior*, 1(2), 179-189.
- Porter, Woodworth, M., Earle, J., Drugge, J., & Boer, D. (2003). Characteristics of sexual homicides committed by psychopathic and nonpsychopathic offenders. *Law and Human Behavior*, 27(5), 459-470. doi:10.1023/a:1025461421791

- Park, Sun W, & Colvin, C. Randall. (2014). Narcissism and Discrepancy Between Self and Friends' Perceptions of Personality. *Journal of Personality*, 82(4), 278-286.
- Pico-Alfonso, Maria Angeles. (2005). Psychological intimate partner violence: The major predictor of posttraumatic stress disorder in abused women. *Neuroscience and Biobehavioral Reviews*, 29(1), 181-193.
- Regan, P.C., & Durvasula, R.S. (2016). A Brief Review of Intimate Partner Violence in the United States: Nature, Correlates, and Proposed Preventative Measures. *Interpersona. An International Journal on Personal Relationships*. 9(2), 127-134.
- Reid, J. A., Haskell, R. A., Dillahun-Aspillaga, C., Thor, J. A. (2013). Contemporary review of empirical and clinical studies of trauma bonding in violent or exploitative relationships. *International Journal of Psychology Research*, 8(1), 37-73.
- Reidy, Dennis E, Zeichner, Amos, & Seibert, L. Alana. (2011). Unprovoked Aggression: Effects of Psychopathic Traits and Sadism. *Journal of Personality*, 79(1), 75-100.
- Riggs, D., & Bartholomaeus, C. (2018). Gaslighting in the context of clinical interactions with parents of transgender children. *Sexual and Relationship Therapy*, 33(4), 382-394.
- Roos, Lydia G, O'Connor, Victoria, Canevello, Amy, & Bennett, Jeanette M. (2019). Post-traumatic stress and psychological health following infidelity in unmarried young adults. *Stress and Health*, 35(4), 468-479.
- Rogers, R., & Cruise, K. R. (2000). Malingering and deception among psychopaths. In C. B. Gacono (Ed.), *The clinical and forensic assessment of psychopathy: A practitioner's guide. The LEA series in personality and clinical psychology* (pp. 269-284). Mahwah, NJ : Erlbaum.
- Rohmann, E., Neumann, E., Herner, M., & Bierhoff, H. (2011). Grandiose and Vulnerable Narcissism. *European Psychologist*, 17(4), 279-290.
- Rogoza, Radoslaw, Zemojtel-Piotrowska, Magdalena, Kwiatkowska, Maria M, & Kwiatkowska, Katarzyna. (2018). The Bright, the Dark, and the Blue Face of Narcissism: The Spectrum of Narcissism in Its Relations to the Metatraits of Personality, Self-Esteem, and the Nomological Network of Shyness, Loneliness, and Empathy. *Frontiers in Psychology*, 9, 343.
- Rudd, M. D., Berman, A. L., Joiner, T. E., Jr, Nock, M. K., Silverman, M. M., Mandrusiak, M., Van Orden, K., & Witte, T. (2006). Warning signs for suicide: theory, research, and clinical applications. *Suicide & life-threatening behavior*, 36(3), 255-262. <https://doi.org/10.1521/suli.2006.36.3.255>

- Ryan, K. M., Weikel, K., & Sprechini, G. (2008). Gender differences in narcissism and courtship violence in dating couples. *Sex Roles, 58*, 802–813.  
<http://dx.doi.org/10.1007/s11199-008-9403-9>.
- Schulze, Dziobek, I., Vater, A., Heekeren, H. R., Bajbouj, M., Renneberg, B., Heuser, I., & Roepke, S. (2013). Gray matter abnormalities in patients with narcissistic personality disorder. *Journal of Psychiatric Research, 47*(10), 1363–1369.  
<https://doi.org/10.1016/j.jpsychires.2013.05.017>
- Schoenleber, M., Sadeh, N., & Verona, E. (2011). Parallel syndromes: two dimensions of narcissism and the facets of psychopathic personality in criminally involved individuals. *Personality disorders, 2*(2), 113–127.  
<https://doi.org/10.1037/a0021870>
- Seedat, Stein, M., Kennedy, C. ., & Hauger, R. (2003). Plasma cortisol and neuropeptide Y in female victims of intimate partner violence. *Psychoneuroendocrinology, 28*(6), 796–808.  
[https://doi.org/10.1016/S0306-4530\(02\)00086-0](https://doi.org/10.1016/S0306-4530(02)00086-0)
- Simmons, Catherine A, Lehmann, Peter, Cobb, Norman, & Fowler, Carol R. (2005). Personality Profiles of Women and Men Arrested for Domestic Violence. *Journal of Offender Rehabilitation, 41*(4), 63-81.
- Skeem, J., Johansson, P., Andershed, H., Kerr, M., & Louden, J. (2007). Two Subtypes of Psychopathic Violent Offenders That Parallel Primary and Secondary Variants. *Journal of Abnormal Psychology, 116*(2), 395-409.
- Smith, J., & Nizza, I. (2022). Essentials of interpretative phenomenological analysis (Essentials of qualitative methods series). Washington, DC: American Psychological Association.
- Spidel, Hervé, H., Greaves, C., & Yuille, J. C. (2011). 'Wasn't me!' A field study of the relationship between deceptive motivations and psychopathic traits in young offenders. *Legal and Criminological Psychology, 16*(2), 335–347.  
<https://doi.org/10.1348/135532510X518722>
- Shin L.M., Wright C.I., Cannistraro P.A., et al. A Functional Magnetic Resonance Imaging. Study of Amygdala and Medial Prefrontal Cortex Responses to Overtly Presented Fearful Faces in Posttraumatic Stress Disorder. *Arch Gen Psychiatry. 2005;62*(3):273–281. doi:10.1001/archpsyc.62.3.273
- Stern, R. (2007). The gaslight effect: How to spot and survive the hidden manipulations other people use to control your life. Morgan Road Books.
- Stout, M. (2005). *The sociopath next door: how to recognize and defeat the ruthless in everyday life*. Broadway Books.



- Strutzenberg, C. C., Wiersma-Mosley, J. D., Jozkowski, K. N., & Becnel, J. N. (2017). Love-bombing: A Narcissistic Approach to Relationship Formation. *Discovery, The Student Journal of Dale Bumpers College of Agricultural, Food and Life Sciences*, 18(1), 81-89.
- Sweet, P. (2019). *The Sociology of Gaslighting*. *American Sociological Review*, 84(5), 851-875.
- Swogger, M. T., Walsh, Z., & Kosson, D. S. (2007). Domestic violence and psychopathic traits: Distinguishing the antisocial batterer from other antisocial offenders. *Aggressive Behavior*, 33, 1–8. <http://dx.doi.org/10.1002/ab.20185>.
- Taft, C., Murphy, C., King, L., Dedejn, J., & Musser, P. (2005). Posttraumatic Stress Disorder Symptomatology Among Partners of Men in Treatment for Relationship Abuse. *Journal of Abnormal Psychology*, 114(2), 259-268.
- Tortoriello, G.K, Hart, W., Richardson, K., & Tullett, A.M. (2017). Do narcissists try to make romantic partners jealous on purpose? An examination of motives for deliberate jealousy-induction among subtypes of narcissism. *Personality and Individual Differences*, 114, 10-15.
- Uzieblo, K., Soetens, B., & Bijttebier, P. (2011). *The fatal partner: Psychopathy and its effects on the psychosocial and relational well-being of the partner*. Presentation at The Society for the Scientific Study of Psychopathy. Montreal, Canada.
- Vitale, J.E., & Newman, J.P. (2013). Psychopathy as psychopathology: Key developments in assessment, etiology and treatment. In W.E. Craighead (Eds.), *Psychopathology* (2nd ed., pp. 583-615). Hoboken, NJ: John Wiley & Sons.
- Wai, Michael, & Tiliopoulos, Niko. (2012). The affective and cognitive empathic nature of the dark triad of personality. *Personality and Individual Differences*, 52(7), 794-799
- White, J. W., McMullin, D., Swartout, K., Sechrist, S., & Gollehon, A. (2008). Violence in intimate relationships: A conceptual and empirical examination of sexual and physical aggression. *Children and Youth Services Review*, 30(3), 338–351. <https://doi.org/10.1016/j.childyouth.2007.10.003>
- White, H. R., & Widom, C. S. (2003). Intimate partner violence among abused and neglected children in young adulthood: The mediating effects of early aggression, antisocial personality, hostility and alcohol problems. *Aggressive Behavior*, 29(4), 332–345. <https://doi.org/10.1002/ab.10074>
- Widom, C., Czaja, S., & Dutton, M. (2008). Childhood victimization and lifetime revictimization. *Child Abuse & Neglect*, 32(8), 785-796.

- Williams, K., Spidel, A., & Paulhus, D. (2005). *Sex, lies, and more lies: Exploring the intimate relationships of subclinical psychopaths*. Presentation at The Scientific Study for Psychopathy. Vancouver, British Columbia.
- Woody, R. (2019). *Risks of Harm from Psychopathic Individuals* (1st ed. 2019. ed., SpringerBriefs in Psychology). Cham: Springer International Publishing : Imprint: Springer.
- Woodworth, & Porter, S. (2002). In cold blood: Characteristics of criminal homicides as a function of psychopathy. *Journal of Abnormal Psychology*, 111(3), 436-445. doi:10.1037/0021-843x.111.3.436
- Yang, Y., Raine, A., Narr, K. L., Lencz, T., & Toga, A. W. (2006). Amygdala volume reduction in psychopaths. *Society for Research in Psychopathology*.
- Yang, S., & Mulvey, E. P. (2012). Violence risk: Re-defining variables from the first-person perspective. *Aggression and Violent Behavior*, 17(3), 198–207. <https://doi.org/10.1016/j.avb.2012.02.001>