

**Identifying the Effects of Gaslighting in Relationships**

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### Author's Preface

I've long debated what to include in this preface. Should I detail the conditions that stretched a one year research project into a three year endeavor? Should I lecture the scientific community on the ceiling that will forever limit scientific discovery should we remain bound by the present demarcations of our scientific method?

Perhaps, I could comment on how my process of scientific exploration has led me to realize that intersectionality of mind & body are key to healing the brokenness of this world. I could defend that interdisciplinary study that merges the different worlds of intellectual discussion through intersectional can, and will, mend the micro & macro-level wounds sustained over the course of human history. I could say that kindness, which can only be activated by radical empathy and sustained by intentional compassion towards those "unlike" ourselves, must be re-infused into the fabric of our systems in order to rectify the harm that has been done.

With all that *could* be said, I have finally deduced what *must* be said:

Words don't exist within the spoken language to convey the gratitude I feel as I fill the final pages of this Honors Thesis, but, where language falters, the gift of allegory steps in to fill the gap.

Here, I begin the story of the man with the turquoise rag:

*He had nothing.*

*He had nothing – that is, nothing but a little turquoise rag he used to catch his tears that he would use to build an ocean to sail away. The people, they always gathered to mock him for his nakedness – his inherent inability to cover the scars of battles passed.*

*He had nothing.*

*But one day, someone slowed down: this person stooped low, crouched down – if not to just get a closer look. He peered into the eyes of the man with the turquoise rag and saw: he had nothing.*

*But between the pupils, the irises, and the darkness that raged inside – he saw the man’s humanity. Carefully, he placed a worn down cap upon the downtrodden head of the man with the turquoise rag.*

*He had something.*

*It wasn’t much, but it was something. Enough to shield him from the glaring rays of sun during the summer days and the glaring daggers of his mockers during winter nights.*

*Something began to change. One by one, someone would slow down, stoop low, crouched down – if not just to get a closer look. One by one, strangers placed a shirt on his back, slid a shoe upon his foot, poured some water in his cup.*

*Surrounding him, his makeshift guardians, now missing a sock, a dollar, a tie., Now, nobody had everything, but everybody had something.*

*One day, he found a little boy: he had nothing. The man with the turquoise rag slowed down, he stooped low, crouched down – if not just to get a closer look. The boy had nothing – that is, except a tiny pillow on which to lay his head. The man gave the boy his shirt – a freshly pressed, cotton thing.*

*The boy clutched the turquoise thing, clinging onto it with all his might – he doesn’t know why now:*

*But he will soon.*

Much could be said of this poem – more than there are pages for this abbreviated preface. So, instead of delineate each of the takeaways, I will say this:

To my family, to my friends, to my employers, to my Honors Council, and to the strangers at the countless coffee shops I visited to complete this project – thank you for putting the cap on my head, thank you for putting the shirt on my back, a shoe upon my foot, and some water in my cup. Your contributions go farther than you may ever know.

And finally, to myself, thank you for this turquoise rag: thank you for this reminder that you are (and will always be) more than the sum of the things you’ve been through.

### **Abstract**

Narcissistic abuse is a form of emotional abuse that requires extensive research to support the healing of survivors. This study seeks to identify the effects of gaslighting on a survivor along with potential risk factors for abuse. Gaslighting is a subtle form of “emotional manipulation” and “psychological manipulation” where the abuser intentionally and systematically “feeds false information in order to make the other party question their perception of reality (ie., doubting their memory, sanity, etc.)” (Psychology Today, 2024). This paper hypothesizes that participants who score higher in gaslighting will also score higher in depression, anxiety, and empathy, but lower in self-esteem. There were a total of 379 participants (102 men, 262 women, 9 non-binary people, and 2 trans-identifying people<sup>1</sup>) ages ranging from 18 to 72 years old. Data was gathered using self-report measures administered through Qualtrics. The results indicate that high anxiety, high depression, and low self-esteem were significant predictors of gaslighting in a relationship; empathy was not found to be a significant predictor of gaslighting in a relationship. The implications of this study are (1) open-ended research exploration is necessary to uncover the subtleties of narcissistic abuse, and (2) abstract healing mechanisms are vital to allow survivors to rebuild self-trust and process the abuse.

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<sup>1</sup> The 4 remaining participants either preferred to self-describe, or opted not to disclose.

## **Introduction**

### I. Introduction Paragraph

On any given day, there are more than 20,000 phone calls made to domestic violence hotlines nationwide; despite the prevalence of this issue, most cases of domestic violence are never reported to the police (Project Sanctuary, 2024). The nature of these cases tends to vary, but the most widely recognized type of abuse takes the form of physical abuse (ie., hitting, kicking, damaging personal property, and assault). The lesser recognized form of abuse, emotional abuse, is just as damaging to survivors. According to research from the Australian Bureau of Statistics (2022), 1 in 4 women (roughly 2.2 million) have experienced partner emotional abuse since the age of 15, and an estimated 1 in 6 men (roughly 1.4 million) have experienced partner emotional abuse since that same age. The immense prevalence of emotional abuse makes it imperative for research to be done, that ensures that abuse is caught early on to more easily treat and advocate for survivors. There exists a gap in the research on more subtle forms of emotional abuse. This gap is generally caused by challenges to identify the presence of abuse, causing low reporting of the abuse, which subsequently leads to reduced research on the topic. Given this gap in the literature, this paper will be focusing on a specific type of emotional abuse called narcissistic abuse; the study itself will zero in specifically on a construct called gaslighting which is a manipulation tactic that is frequently present in narcissistic abuse.

### II. Introduction Structure

In order to lay the groundwork for the thesis of this paper, the introduction will maintain the following structure: (1) emotional abuse will be broadly defined and described (ie., background, differentiation between physical & emotional abuse, warning signs, effects, etc.),

(2) narcissistic abuse will be defined and described (ie., the history of theorists' understanding of narcissism ranging from its classical origins in Greek mythology to current disagreements on Narcissistic Personality Disorder's inclusion in the *Diagnostic and Statistical Manual of Mental Disorder*, the accepted cycle of narcissistic abuse, related vocabulary unique to the study of narcissistic abuse, a broad introduction of possible warning signs and effects of this form of abuse), (3) gaslighting will be described and defined (ie., the narrative origin for the term as seen through the 1944 movie *Gaslight*, a broad intro on the warning signs and effects of gaslighting, types of gaslighting with examples, etc.), (4) the hypothesis of this paper will be found in this section, (5) a literature review for each of the variables in the hypothesis will conclude the introduction paragraph.

### III. Emotional Abuse

Emotional abuse is the blanket term for all non-physical actions that are intended to control and isolate another party. It is usually a pattern of behaviors, rather than an isolated incident; within emotional abuse, the abuser<sup>2</sup> intentionally seeks to instill fear in the survivor<sup>3</sup> as a means of establishing control (Sussex Publishers LLC, 2024). The American Psychological Association (2018a) defines emotional abuse as “a pattern of behavior in which one person deliberately and repeatedly subjects another to nonphysical acts that are detrimental to behavioral and affective functioning, and overall mental well-being”. According to their definition, emotional abuse can take the form of “verbal abuse, intimidation, terrorization, humiliation, degradation, exploitation, harassment, rejection and withholding of affection, isolation, and

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<sup>2</sup> Note that for the purposes of this paper, the term ‘abuser’ will be used broadly to reference the perpetrator of abuse.

<sup>3</sup> Note that for the purposes of this paper, the term ‘survivor’ as opposed to ‘victim’ will be used broadly to reference the party on the receiving end of abusive behavior. The intentional use of empowering language is integral to the thesis of this paper.

excessive control” (American Psychological Association, 2018a). Other sources also suggest emotional abuse typically takes the form of “threats, insults, constant monitoring, excessive jealousy, manipulation, humiliation, intimidation, and dismissiveness” (The National Domestic Violence Hotline, 2022). The main takeaways regarding emotional abuse is that it is an interpersonal form of abuse where both the methods and resulting effects are often all but invisible.

There is a stark distinction between emotional and physical abuse; there is also an unfortunate difference in the research available on emotional abuse due to its subtle nature. The American Psychological Association (2018b) defines physical abuse as “[behavior that is] deliberately aggressive or violent [toward another] that results in bodily injury. Physical abuse can take the form of “punching, kicking, biting, choking, burning, shaking, and beating”; instances of physical abuse can be so severe that they result in permanent damage such as traumatic brain injuries (TBI) or death (American Psychological Association, 2018b). Kumari (2020) comments that the comparatively less societal and research attention received by emotional abuse and neglect (compared with physical and sexual abuse and physical neglect), might be explained by their “less visible immediate impact”. In other words, emotional abuse lacks direct and measurable signs of measurable physical harm, damage, injury, or anything that is otherwise traditionally defined as an outward sign of abuse (Kumari, 2020). The imminent physical danger associated with physical abuse can make this form of abuse appear to be more pressing on an intervention level, whether interventions are applied practically through resources and organizations or educationally through studies and research. Despite this trend, the effects of emotional abuse are just as devastating, though often initially invisible, so the need for further research and resource allocation needs to be approached with an equal amount of urgency.

The difference in research on emotional abuse vs. physical abuse is not solely due to the perceived difference of imminent danger. Another explanation for the lack of research attention directed towards emotional abuse could be explained in part by “cultural variations in the definition of what constitutes as emotional abuse”, in other words, whereas some cases of emotional abuse are easily recognizable (ie., yelling, constant swearing, criticism, humiliation, etc.), other examples of emotional abuse are subtle in a way that makes them difficult to identify (Kumari, 2020). Some nuanced examples of emotional abuse include “unrealistic expectations or unfair demands”, “unfair treatment [on the basis] of certain characteristics (ie., physical disability)”, instances where the treatment arises out of “childhood or lived experiences of parents, caregivers, teachers, etc., that cause unintended harm to the child”, and finally other subtle instances that are both difficult to spot and measure (ie., never showing emotion when interacting with the child) (Kumari, 2020). As it relates to cultural nuances, Kumari (2020) references how, in some Asian communities, emotional abuse echoes “culturally accepted practices”, like how female children routinely receive less care and fewer resources than boys even within the same family. Taking all of this into account, it’s clear that, at times, the study of emotional abuse is inhibited by different cultural understandings of what constitutes emotional abuse.

The warning signs of emotional abuse may not be as apparent as physical abuse because of the invisible nature of emotional abuse, but they are still there. Emotional abuse commonly takes place within the confines of a romantic relationship by a romantic partner, but it also occurs outside of that context with. Emotional abuse can happen with a friend in platonic friendships, with a parent or sibling in familial relationships, with a boss or coworker in professional or workplace settings, etc. Some behavioral signs that may indicate emotional abuse from the end

of the abusive party include: shaming (ie., targeting insecurities and using words or actions to make another person feel ashamed to be themselves), blaming (ie., shifting responsibility away from abusive actions), criticizing (particularly cruel and nonconstructive comments), guilt, humiliation (degradation to make a person feel less than human), ridiculing, dismissing (ie., dismissing thoughts, values, or opinions, to the point where the person questions the value of their input), accusing, neglecting (ie., “deliberately withholding affection or punishing with the silent treatment”), monitoring (anything that destroys a sense of privacy, like “reading text messages, scanning social media, showing up at events you’re attending”) (Gillette, 2022). It should be noted that in an abusive dynamic, these behaviors often occur in tandem with each other, and persist *with or without* resistance from the other party. Identifying these warning signs of an emotionally abusive relationship dynamic is the first step of removing oneself from the situation.

Besides the behavioral warning signs of emotional abuse identified in the abuser’s behavior, there are warning signs that a survivor of emotional abuse can identify within themselves. Once again, these signs can present themselves in a variety of relationships ranging from romantic to platonic, familial, work, etc. Some personal signs someone may experience due to emotional abuse include the following: social withdrawal (ie., feeling isolated or actively withdrawing from others), low self esteem (ie., becoming very self critical and feeling worthless), fear (ie., walking on “eggshells”, and refraining from saying or doing things that may elicit a certain reaction from the other party), losing your identity (ie., forsaking hobbies and interests), dependence or codependence (ie., losing sense of independence), shame (ie., experiencing guilt or anxious about who they are, physical changes (there are changes in sleeping, eating, and weight patterns), and psychological symptoms (ie., an increase in symptoms

of mental conditions such as depression) (Gillette, 2022). Each of these symptoms can be very jarring for a survivor even in isolation; unfortunately, with one warning sign often comes many others, and a survivor of emotional abuse may find themselves experiencing a barrage of emotional changes due to the abuse<sup>4</sup>. The destabilizing nature of these warning signs can also make it challenging for survivors to recognize what is happening in the moment, but a combination of educated bystanders<sup>5</sup> and increased survivor self-awareness can help survivors to identify harmful relationship dynamics and take steps to remove themselves from harm's way.

Domestic violence, in every form, is a catastrophic experience that affects a person long after they have left the abusive situation. Physical and emotional abuse can both be debilitating for survivors whether in the immediate way they are exposed to physical harm or the subtle way that they are subjected to often imperceptible mistreatment. Both forms of abuse require research to provide empirically supported methods to identify maltreatment and heal survivors from lasting effects. Emotional abuse requires special attention due to its subtle and sometimes imperceptible nature; further developing research around this form of abuse will be extremely valuable to the large number of people that have faced this form of abuse. This paper will focus specifically on a particular subtype of emotional abuse called narcissistic abuse.

#### IV. Narcissistic Abuse

##### *A. Overview*

Narcissistic abuse is a form of abuse that stems from narcissistic behaviors, particularly from people with narcissistic personality disorder (NPD)<sup>6</sup>. Narcissistic abuse can take the form

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<sup>4</sup> Warning signs may persist long after emotionally relationship dynamic has been terminated.

<sup>5</sup> As in friends, family, coworkers, etc. that recognize the warning signs occurring within a survivor and take steps to share patterns they are noticing.

<sup>6</sup>A person may experience narcissistic abuse without being involved with a clinically diagnosed narcissist. This point will be reinforced later in the paper.

of emotional, psychological, or physical abuse (Sissons, 2022). Narcissistic personality disorder can be attributed to a combination of genetic and environmental factors that arise during childhood (ie., excessive praise or criticism, unpredictable care, neglect, trauma, abuse, rejection, fragile ego) (Brazier 2023). A person with NPD tends to display extreme concern for prestige and power along with a lack of empathy for others; they may behave selfishly, be manipulative, be arrogant, struggle to empathize with others, and these behaviors tend to stem from deep feelings of insecurity (Sissons 2022). Research suggests that across the entire U.S. population, NPD may affect between 1-15% of people (Sissons, 2022). It's important to note that a degree of narcissism is expected, normal, or even necessary; this can be termed as "healthy narcissism" and refers to prioritizing your own self-interest to the extent of fulfilling one's needs in a way that is non-exploitative (Lebow, 2023). This paper is not focussing on "healthy narcissism" but rather on maladaptive narcissism that seeks to exploit or subjugate other parties. Additionally, it is important to note that people can demonstrate narcissistic traits or behavior without meeting the entire criteria for narcissism; the severity of traits being demonstrated tends to follow a spectrum. Due to this variance, a person may engage in the cycle of narcissistic abuse without entirely meeting the NPD criteria. For the purposes of this paper, the term 'abuser' will be used as a blanket term to reference both clinically diagnosed narcissists as well as others that exist somewhere along the spectrum. This vocabulary is for simplicity's sake and clarity of message, but is not intended as a means of labeling people participating in toxic relationship patterns. Paradoxically, by collapsing the use of the word abuser and narcissist to include those who fall into a more covert version of narcissistic abuse, we can gain a clearer, more nuanced understanding of the study of narcissistic abuse as a whole.

*B. History of the Study of Narcissism*

The study of narcissism has gone through a wide set of changes starting from its early roots in classical mythology to modern day scientific investigation. The origin of the term *narcissism* is a Greek myth where a hunter named Narcissus saw his reflection in a pool of water, fell in love with it, and subsequently drowned attempting to kiss his own reflection (Brazier, 2023). This early account on the idea of narcissism was conceived by the Roman poet Ovid in 8 C.E. within a collection of stories he had written called *Metamorphoses* (Levy, 2011, p. 3). By Ovid's description, Narcissus was a character deeply enamored, or even obsessed, with the self to the point of destruction. This abstract foundation for the study of narcissism is an excellent demonstration on how an initially narrative-based approach to understanding a concept is beneficial for this specific form of abuse. This paper will further suggest that given the current state of the study of narcissistic abuse, those seeking to understand must place an immense emphasis on the stories and personal narratives of survivors.

Following the early classical take on narcissism, early theoreticians who were investigating narcissism as a personality characteristic initially did so in relation to "human sexuality"; in 1898, Havelock Ellis, a British sexologist-physician, was the first to reference the Narcissus myth as an "autoerotic sexual condition" where "sexual emotions [are] absorbed, and often entirely lost, in self-admiration" (Levy, 2011, p. 4). By his definition, narcissism involved being self-obsessed on a physical level. Entering the 1900s, psychoanalysts began to elaborate on Ovid and Ellis' ideas of narcissism. For example, in 1908, Isidor Sadger distinguished between normal levels of egoism & self-love and other "more extreme and pathological forms [of egoism & self-love] that involved overvaluation of and overinvestment in one's own body" (Levy, 2011, p. 4). Otto Rank later built on this in 1914, suggesting that narcissism revolved around vanity

and self-admiration that was not exclusively sexual in nature (Levy, 2011). During this phase of the study of narcissism, theoreticians were moving away from merely regarding narcissism as self-infatuation in a sexual sense; rather, a differentiation began to be made between regular levels of self-love and extreme overvaluations of the self. Freud was also noted to have tapped into the conversation in 1914, where he considered narcissism to be a “universal stage of psycho-sexual development” in as much as it serves as a “component of self-preservatory instincts” (Levy, 2011, p. 4). In this way, Freud pointed to the baseline necessity for a certain level of narcissism in survival. This is related to the concept of “healthy narcissism” referenced earlier on in this paper. Whether it was Ellis, Freud, Sadger, or Rank, in these early cases, narcissism was being regarded by the theorists as an attitude or phase of development, but not yet as a personality type or disorder.

Following the early theorists, scientists began to move towards conceiving narcissism as a personality type and possible pathology. Moving into the mid to late 1900s, narcissism began to be thought of in this way by theorists such as Robert Walder, Signund Freud, Wilhelm Reich, and Karen Horney; such theorists discussed related personality traits and tendencies of a narcissistic personality such as “arrogance”, “haughtiness”, response to emotional hurt with “cold disdain, ill humor, and overt aggression” (Levy, 2011, p. 5). In 1939, Horney built upon this connection between character traits and narcissistic personality by proposing a variety of possible manifestations of narcissism such as “aggressive, perfectionism, arrogant-vindictive types” (Levy, 2011, p. 5). Presently, narcissists are divided into two main groups, overt narcissists and covert narcissists; while there is not an established number of types of narcissists between those two groups eight main subgroups for types of narcissists are as follows: grandiose, vulnerable, malignant, communal, malignant benign, entitled, and cultural (Prusko, 2023). Each

of these different types of narcissism varies in their presentation of narcissistic behavior.

Similarly, the ease with which each type can be detected by others differs based on whether they fall under the category of overt or covert narcissism.

The understanding of narcissism continued to expand and develop throughout the 1900s. Horney's suggestions continued to echo the considerations of the early 1900s by suggesting a difference between "healthy self-esteem [and] pathological narcissism" where beliefs of the self reached a place of "unrealistic self-inflation," a concept Kernberg coined as "pathological grandiosity" (Levy, 2011, p. 6). In 1968, Kohut was the first to introduce the term 'Narcissistic Personality Disorder' (Levy, 2011, p. 6). This is valuable to note because it explicitly names narcissism as a pathological condition that requires targeted intervention. Later in the 1970s, there was an increase in the general interest in the study of narcissism on a level of psychoanalysis, social theory, and social and personality psychology (Levy, 2011). By this point, analysis of narcissism was trending closer to current views of the study where the fundamental lens is one guided by personality research of related social dynamics.

The etiology of Narcissistic Personality Disorder was being considered during the late 1900s. During this time, Kernberg continued to propel the study of narcissism forward by proposing that narcissism develops as a consequence of "parental rejection, devaluation, and an emotionally invalidating environment in which parents are inconsistent in their investment in their children, or often interact with their children only to satisfy their own needs" (Levy, 2011, p. 6). By this theory, early childhood experiences with caregivers plays a huge role in the development of narcissistic characteristics. Kernberg interpreted grandiose tendencies to be the product of overcompensation for a negative self-concept that developed early in childhood. Though it is not within the scope of this paper, it does raise the possibility for additional analysis

on the role early childhood attachments and general attachment theory plays a role in the development of narcissism.

It took some time before Narcissistic Personality Disorder was included as part of the *Diagnostic and Statistical Manual of Mental Disorders*; even when it was eventually added, there was further debate on the nature of its inclusion. NPD was not included as an official diagnosis in either the *DSM-I* or *DSM-II*, but was officially introduced in the *DSM-III*. Changes were made to the criteria used in the *DSM-IV* which led to a number of critiques concerning the DSM's "failure to capture the intended clinical phenomena" (Levy, 2011, p. 9). The diagnosis of Narcissistic Personality Disorder in the *DSM-IV* has been criticized for its limitations in capturing the range and complexity of narcissistic pathology; to elaborate, the diagnostic criteria puts a greater emphasis on a narcissistic person's interpersonal patterns and externally presenting behaviors rather than on the individual's internal experience which lends itself to low clinical utility in diagnosis as well as limited guidance for treatment (Ronningstam, 2010). Essentially, the NPD diagnostic criteria in the *DSM-IV* was centered more around what a narcissist's interactions looked like with others (external), rather than a more etiological focus concerning the development of the condition (internal). The implication of the critique is that the external facing emphasis makes it increasingly difficult to create viable treatment options for those affected by Narcissistic Personality Disorder.

The way narcissism is understood has evolved immensely from its initially narrative format to its present pathological and personality-based interpretation. Originally, it was conceived as a sense of sexual obsession with the self until it was later considered a natural phase of development. Theorists acknowledged a baseline need for certain levels of narcissism in the interest of survival. Eventually after narcissism began to be regarded as a personality

disorder, associated behavior tendencies and possible causal factors were discussed by theorists. That said, critique has remained with respect to its inclusion in the *Diagnostic and Statistical Model of Mental Disorders*, and further elaboration on the topic is required to support the expansion of treatment options. Even though the study of narcissism has a long way to go; the evolution of the study of narcissism provides a valuable foundational understanding for arguments made in this paper moving forward.

### *C. The Study of Narcissistic Abuse*

Narcissistic abuse is a form of domestic violence that is often undetectable to survivors and, at times, even to bystanders of the relationship dynamic. Narcissistic abuse is the psychological abuse that a person with narcissistic traits inflicts on another person (Upton, 2023). As has been suggested earlier in this paper, the abuser may or may not meet the full criteria of a clinically diagnosed narcissist as the personality and behavior exists on a spectrum. Weinberg & Ronningstam (2022) estimate the prevalence of Narcissistic Personality Disorder to be 1 to 2%, but because anybody has the capacity to display narcissistic characteristics in a relationship, the prevalence of narcissistic abuse is likely to be higher. Given the subtle nature of narcissistic abuse, understanding the general trajectory of the cycle of abuse is valuable to both prevent the damage in the first place as well as interrupt a cycle at work.

There is an accepted cycle of narcissistic abuse within this small scientific community. Though narcissistic abuse can present itself in a variety of different contexts ranging from romantic, familial, platonic, work, etc., this paper will reference the abuse both in a general context, and mainly in a context that most directly relates to romantic relationships for the sake of simplicity<sup>7</sup>. The cycle of narcissistic abuse refers to “an abusive pattern of behavior that

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<sup>7</sup> Breaking down narcissistic abuse in these different contexts is an area of exploration for future studies.

characterizes relationships with people with narcissistic traits” (Gumpta, 2022). The first stage of the narcissistic cycle of abuse is the idealization stage. This stage is often characterized as the ‘appreciation’ stage. The appreciation is beyond a regular threshold for appreciation in a relationship and reaches the level of love bombing (Gumpta, 2022). During this phase of the relationship, the survivor may experience a sense of an instant connection where they are made to feel unique and ultimately put on a pedestal; the one of the main markers of the idealization stage is a “fast and fervent” quality to the start of the relationship (Gumpta, 2022). Intense and premature displays of affection are considered a part of the first stage of abuse because the tactic is positioned to establish control by the abuser in the relationship.

Love bombing is one of the many terms used specifically within the world of narcissistic abuse to describe the affection given at the start of and throughout the narcissistic cycle of abuse. Love bombing is a manipulation tactic where a person “bombs” the other party with “extreme displays of attention and intention” specifically with the intent to “manipulate” and “establish control” (Field, 2023). Being on the receiving end of love bombing can appear positive since it feels like being showered with “love”; however, love bombing is a common tactic used by narcissists that can often creates a sense of cognitive dissonance for survivors when it is used after an abusive behavior has occurred. Other potential signs of love bombing include the following: intense displays of affection or admiration, grand gestures or declarations of love, occurring mainly at the start of the relationship but used throughout other stages of the cycle of abuse, the fact that it is used as a means to either lure someone or keep someone in a relationship (Beri, 2024). Another thing to note, with regards to love bombing in a narcissistic relationship is that the party engaging in such behavior often tends to alternate between the love bombing

behaviors and dismissive behaviors (ie., gaslighting, stonewalling, triangulating, general insults) that will be discussed later in this paper.

The second stage of the cycle of narcissistic abuse is the devaluation stage. This is a stage that trends to begin very gradually. In this stage the following things begin to happen, “passive-aggressiveness, backhanded compliments, subtle criticism, stonewalling, mind games, lack of empathy, ridicule, humiliation, etc.” (Gumpta, 2022). Subtle suggestions that the survivor has done something wrong eventually turn into aggressive accusations. This is the typical stage in the cycle of abuse where gaslighting enters the equation. Gaslighting is a subtle form of “emotional manipulation” and “psychological manipulation” where the abuser intentionally and systematically “feeds false information in order to make the other party question their perception of reality (ie., doubting their memory, pertinence, at times sanity, etc.)” (Psychology Today, 2024). Gaslighting is the main construct of interest in this paper and will be discussed later in further detail.

During the devaluation, the survivor may pull away after attempts to repair the relationship leading the abuser to cycle back to the idealization stage where love bombing is once again used to draw the other party back in. The process of leaving and returning to the narcissistic relationship forms a trauma bond within the survivor. Trauma bonding is defined as the “attachment an abused person feels [toward] their abuser, [particularly] in a relationship with a cyclical pattern of abuse” (Resnick, 2024). Contrary to the popularly misheard assumption, trauma bonding does not occur when two people bond over shared trauma, but rather due to the cycle of abuse and presence of positive reinforcement; the trauma bond forms when after each circumstance of abuse, the abuser professes love, regret to make the relationship feel safe and needed for the abused person. This can go on for months, years, and even decades, and the

cognitive dissonance that ensues is very damaging to the survivor. Risk factors for trauma bonding include attachment insecurity, childhood maltreatment, exposure to abusive relationships in growing up, lack of social support, and low self esteem (Resnick, 2024). The signs of a trauma bond include the survivor making excuses to others to cover up the abuser's behavior, the survivor believing abuse is their fault, the survivor becoming isolated by the abuser from friends and family, and the survivor continuing to trust the abuser despite abusive behavior (Resnick, 2024). The trauma bond that forms from the alternation between the idealization stage and the devaluation stage makes it increasingly difficult for a survivor to escape the cycle of narcissistic abuse.

The final stage of the narcissistic cycle of abuse is the discard stage. This stage is exactly what it sounds like – it is the stage in which a survivor is swiftly and often brutally discarded in different ways that are each damaging to the survivor. Examples of behaviors in this phase of the cycle of narcissistic abuse include betrayal of the relationship (ie., cheating), expression of contempt and rage by the abuser, invalidation of the survivors thoughts and emotions, physical, emotional, and verbal abuse, or ultimate termination of the relationship (Suxena, 2024). The discard phase is not to be confused with times when the survivor tries to relationship during various points of the cycle of abuse; the key marker of the discard phase is that it's the abuser participating in abusive behavior leading to the end of the relationship.

Narcissistic hoovering is yet another term unique to the study of narcissistic abuse that becomes relevant in the discard phase. Hoovering is a manipulation tactic used to suck the other party back into the relationship when they are in the process of attempting to withdraw or step away (Cleveland Clinic, 2024). Hoovering is not a clinical term, but rather a term that instead refers to a dynamic where the abuser is reestablishing control and continuing to perpetuate the

cycle of abuse (Cleveland Clinic, 2024). Narcissistic hoovering includes behaviors such as repeatedly reaching out, threats to hurt themselves as a result of the relationship, showing up unexpectedly at work or home, sending expensive gifts (love bombing), and lying or exaggerating about the survivor's behavior during the relationship and having those people reach out on behalf of the abuser (Suxena, 2024). After the discard phase, the cycle of abuse tends to repeat itself due to the timing and repetitiveness of hoovering attempts, alongside the dysregulated state the survivor likely finds themselves in, making it very challenging to break the cycle of abuse.

During the discard phase, the narcissist often utilizes other people to further abuse towards the other party. In the world of narcissistic abuse, the term "flying" refers to "the people who carry out the work of a narcissist or abusive person" (England, 2023). Flying monkeys may be friends/associates of the abusive person, or friends/associates of the abused party; they may also be authority figures in the survivor's life in some way (England, 2023). Flying monkeys are often difficult to spot because they may seem like everyday people simply taking a stance on a situation. What distinguishes a flying monkey from your everyday person is warning signs such as the following: the person unequivocally sides with the abusive party regardless of the evidence presented or nature of the situation, they pass along information to the narcissist that is used to further harass the abused party, they participate in gaslighting and manipulation, and they spread rumors and trivialize the survivor's feelings and experiences (England, 2023).

Those that fit the category of a flying monkey are the third person in the "toxic triangle" of narcissistic triangulation (Holland, 2023). Narcissistic triangulation is a manipulation tool where when two people disagree a third person is brought into the conversation to tip the scales in favor of the abuser. What differentiates narcissistic triangulation from the typical triangulation

that may come up in everyday conflict resolution is that narcissistic triangulation is done consistently with the purpose of further disarming and psychologically abusing another party (Holland, 2023). Tactics such as narcissistic hoovering and narcissistic triangulation make it all the more difficult for survivors to escape the cycle of abuse after the discard phase. The effects of narcissistic abuse include Post-traumatic stress disorder (PTSD), Complex post-traumatic stress disorder (C-PTSD), low self esteem, increased self doubt, brain fog or confusion, isolation, depression, physical symptoms (ie., body aches) etc. (Sissons, 2022). Several of these effects will be further elaborated upon in later sections of this paper.

#### V. Gaslighting

Gaslighting is arguably one of the most damaging tactics associated with narcissistic abuse. Gaslighting is a subtle form of “emotional manipulation” and “psychological manipulation” where the abuser intentionally and systematically “feeds false information in order to make the other party question their perception of reality (ie., doubting their memory, pertino, at times sanity, etc.)” (Psychology Today, 2024). The origin of the word “gaslight” is the 1944 movie “Gaslight” where one character named Gregory intentionally attempts to cause his wife Paula to lose her mind by manipulating her, the people in her life, and her physical surroundings (Abramson, 2014)<sup>8</sup>. Gaslighting is a control tactic where the abuser denies the reality of the other party as a means of control. Oftentimes, the gaslighting present narcissistic abuse is subtle but still has jarring implications for a person’s self esteem, sense of self, etc. Stern (2018) shares a real-life example about a person named Melanie who “idealized her gaslighter” despite the immense abuse she had sustained (p. 133). The author continues to reference herself and other examples to demonstrate the pattern that occurs.

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<sup>8</sup> The reader should, once more, note the use of narrative as a starting point for understanding abuse

As time continues, gaslighting skews a person's perception of reality in such a way that it seems normal. Therefore, this form of manipulation allows abuse to become commonplace in the life of survivors. *The Gaslight Effect* by Dr. Robin Stern (2018), identifies how manipulation presents itself in patterns within the life of survivors of abuse. Stern (2018) references a vast array of life experiences ranging from her own, to clients, to family members, and even to fictional characters (as seen in the 1944 movie *Gaslight*), to demonstrate her point (pg. XXII). Melanie, one of the clients she interviewed, is an excellent example of how after some time a person can become trauma bonded to their abuser and be seemingly unaware of the abusive dynamic (pg. 133). Ultimately, this pattern of abuse often goes undetected by both onlookers and the victims themselves, so understanding the tactics presented in this book serves as a tool for breaking abusive cycles - especially covert ones.

There are several known gaslighting tactics used against survivors. For example, countering (involves abuser actively questioning memory of an event), withholding (when the abusive person pretends not to understand), trivializing (when the abusive person dismisses the survivors' concerns or feelings as irrational, and diverting (where the subject is changed completely, or focus of the conversation is shifted from the content to the credibility) (Nall, 2020). This is not an exhaustive list, but a short set of examples of ways in which gaslighting can come up in an abusive situation. Some examples of phrases that may be used by someone that is gaslighting are "*You are wrong, you never remember things correctly*", "*You are imagining things*", "*Stop overreacting*", "*I do not understand, you are just trying to confuse me*", or "*You are just too sensitive*" (Nall, 2020). As has been suggested earlier in this paper, gaslighting behavior is not unique to relationships involving diagnosed narcissists. Therefore, since anybody can participate in gaslighting within a relationship it is all the more important to be informed on

how gaslighting presents itself so as to prevent oneself from being an unknowing participant in the gaslighting or recipient of it.

The lack of academic research on gaslighting has created a need to make the construct more palatable to academia. In *Epistemic Dimensions of Gaslighting: Peer-disagreement, Self-trust, and Epistemic Injustice*, Spear (2019), makes the argument that gaslighting has “crucial epistemic dimensions” despite the fact that the idea is “roundly rejected” on the basis that the mechanisms of gaslighting have not been properly “understood in epistemic terms” (p.1). Essentially, the origin and definition of gaslighting is not universally understood leading people to using it while meaning different things. In the article, gaslighting is defined as a method “where one agent seeks to gain control over another by undermining the other’s conception of herself as an independent locus of judgment and deliberation (Spear, 2019, p. 1). Spear’s (2019) working definition of gaslighting is valuable since the lack of research on narcissistic abuse comes with a gap in operational definitions for gaslighting (p. 1). Gaslighting can also be described as a form of manipulation that is used to undermine the survivor’s confidence in their own cognitive abilities, namely with reference to “their emotional reactions, perceptions, memory, or reasoning abilities” (Sodma, 2022, p. 320). An abuser may target the other party's confidence in a specific cognitive ability in isolation (ie., targeting confidence in emotional reactions through emotional gaslighting) or, more likely, multiple at once.

Gaslighting has cascading effects on survivors of narcissistic abuse. Spear (2019) suggests that for survivors of gaslighting, the main issue is a loss of self-trust due to the gaslighter’s goal of convincing their victims that their “thoughts, perceptions, memories, judgements, and evaluations of the situation are so unreliable” they they should instead rely on the interpretation of the gaslighter (Spear, 2019, p. 10). If a survivor cannot trust themselves and

their take on reality surrounding their relationship with the abuser, they will not be able to take necessary steps to remove themselves from the dynamic. Though it still requires further empirical testing, some research suggests that “very intense gaslighting experiences may have especially pronounced effects on memory” (Dickson et al., 2023). Anxiety, depression, isolation, and psychological trauma are all possible long term effects of gaslighting that have consequential impacts on a survivor’s mental health and self-esteem (Sodma, 2022). The involvement of these mental health factors (specifically regarding anxiety, depression, and self esteem) in gaslighting, is a foundational reason why this paper will investigate them in depth through the study.

#### VIII. Honors Thesis Hypothesis

Domestic violence is a serious problem within our society; oftentimes emotional abuse receives less attention because of its covert nature and that is something that needs to change in order to protect the wellbeing of all types of survivors. Gaslighting is a manipulation tactic unique to narcissistic abuse that remains under-investigated. Within this study, participants take self-report measures on their depression levels, anxiety levels, self-esteem, and personality (more specifically as it relates to demonstrated empathy levels). Each of the aforementioned mentioned measures will be calculated and correlated with a gaslighting measure to determine if a relationship exists. It is hypothesized that participants who score higher on the gaslighting measure will also score higher in depression, anxiety, and empathy, but lower in self esteem.

#### IV. Literature Review

Due to the extremely specific nature of narcissistic abuse, there are many research gaps surrounding gaslighting and the other constructs for this study, specifically, anxiety, depression, self-esteem, and empathy. The goal of this section is to (1) share the research that does currently

exist, (2) better illustrate reasoning for directionality of the hypothesis, and (3) denote the importance of the construct to the overall study of narcissistic abuse.

### *Anxiety & Depression Relationship Research*

Some research suggests that having depression may be a risk factor to finding oneself in a narcissistic relationship where gaslighting occurs. It is commonly held in narcissistic abuse scientific discourse that the types of people or personalities that are often targeted for narcissistic abuse cycles are people that are socially isolated, people with a history of trauma, those that are financially dependent, those dealing with chronic illness, those that are emotionally dependent, and finally those who have a low self-esteem (Gumpta, 2024). Depression often occurs after trauma; the trouble a person has with coping with painful experiences or losses can lead them down the path of depression (U.S. Department of Veterans Affairs, 2022). Given that people with a history of trauma are often targets for narcissistic abuse cycles, it is reasonable to suggest that a greater number of depressed individuals may find themselves targeted for abusive relationships as well.

Understanding the anatomy of a survivor<sup>9</sup> is vital to help people identify their areas of vulnerability prior to entering a relationship. Those with pre-existing mental health challenges may have an increased risk of becoming survivors of abuse (Mazza et al., 2021). Though there is minimal research identifying explicit connections with anxiety and gaslighting, anxiety is included as part of the study in part due to the frequent comorbidity of depression and anxiety. Brady & Kendall (1992) organized a study that found that 15.9% to 61.9% of their participants

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<sup>9</sup>The phrase ‘anatomy of a survivor’ is used to reference the personality traits, behavioral tendencies, psychological make up, etc. of someone that may either be a target for the cycle of narcissistic abuse, or simply may have particular challenges with recognizing or leaving the abusive situation due those personality traits, behavioral tendencies, psychological make up, etc.

identifying as anxious or depressed also had bad comorbid anxiety and depressive disorders. Therefore, even though the research on anxiety related to narcissistic abuse is limited, it's reasonable to consider that there is possible comorbidity regarding depressive and anxious traits in targets for narcissistic abuse. By pursuing a deeper understanding how pre-existing depression and anxiety plays a role in one's vulnerability to narcissistic abuse and subsequently gaslighting, a more detailed conceptualization of the anatomy of a survivor can be obtained.

Emotional abuse is commonly understood to have serious psychological implications after a person has entered the abusive dynamic. Mazza et al. (2021) describes how loops of abuse exacerbate mental health conditions causing pre-existing mental health problems to increase vulnerability to partner violence. Regarding narcissistic abuse, Abramson (2014) identifies a main result of sustained gaslighting is "severe, major, clinical depression". Tian et al. (2023) studied the relationship between emotional abuse and depressive symptoms and found a significant relationship between emotional abuse and subsequent depressive symptoms. This study provides justification to further explore how depressive symptoms may come up as a result of narcissistic abuse. Li et al. (2019) conducted a study investigating the same constructs to see if emotional abuse in childhood was linked to adult depressive symptoms. They observed a significant relationship of emotional abuse on adult depression. Mazza et al. (2021) shared that "partner violence has been associated with many mental health consequences: depression, anxiety, post-traumatic stress disorder, eating disorders, suicidal behavior, alcohol or drug abuse, sexual problems, problems with concentration, somatization, social, educational, or occupational difficulties, as well as feelings of blame and guilt or reproach". There are many direct psychological consequences for specific impacts of abuse as well as indirect ones that can denigrate a person's overall mental and emotional wellbeing. Considering all of these things,

understanding the role that depression and anxiety play in the cycle of narcissistic abuse is extremely important in the interest of supporting survivor resilience particularly in the overall interest of suicide prevention and awareness.

### *Empathy Relationship Research*

Though the research on the role a person's empathetic tendencies plays in their capacity to experience gaslighting is not extensive, there is some writing to suggest there may exist a relationship between the two constructs. Abramson (2014) comments in her paper that an abuser may use a variety of methods as leverage when gaslighting, one of them being the leveraging of empathy. Abramson (2014) specifically identifies the social expectation for women to be empathetic, and describes how that may lead to a person extending empathy in a situation where they have been violated in some way. In this case, the research is suggesting that a person that is perceived by an abuser as more empathetic may be considered a viable target given that the person's empathy may be able to be leveraged against them.

There aren't any relevant studies involving empathy's direct relationship with experiencing gaslighting in a relationship; however, there is research to suggest that personality traits in general may be correlated with the capacity to be both the abuser and abused in a relationship. Miano (2021) states that research has been done to determine the association between "gaslighting behaviors and dysfunctional personality domains" for both abusers and survivors. The results showed that for abusers, the domains that were positively associated with gaslighting behaviors were detachment, disinhibition, and psychoticism; on the flip side, the domains that were positively associated with survivors of gaslighting behaviors antagonism, disinhibition, and psychoticism (Miano, 2021). This study provides some context on what to look

for when trying to rely on patterned behavior to predict abusive tendencies or risk factors.

Indeed, Miano (2021) was able to correlate certain personality traits with a propensity to be on the receiving end of gaslighting. This creates a justification to explore whether the same relationship is found between other personality traits, namely, empathy.

The personality trait of empathy was chosen because of the current mainstream understanding of empathy's role in the cycle of narcissistic abuse. Many survivors of this form of abuse gather on online forums (ie., Reddit) to discuss their experiences and process understanding of everything that ensued. There is a commonly held belief amongst the community that being highly empathetic is a risk factor to being targeted by a narcissist. Prioritizing research that is guided by vocabulary familiar to members of the narcissistic abuse survivor community is deeply valuable as it builds trust with community members and provides a starting point to determine the role empathy may play narcissistic abuse. The term "empath" is often used within mainstream conversation of narcissistic abuse; it refers to a person who is "highly attuned to feelings and emotions of those around them"; oftentimes, for those deemed as empaths, the experience goes beyond simply understanding the emotions on an empathetic level, to actually taking those feelings on by experiencing the emotions of another within themselves (Campbell, 2023). Some of the accepted signs of someone regarded as an empath are: the tendency to be deeply affected by the emotions and physical distress of others, the ability to discern a lack of sincerity, see through deception, or ulterior motives in others, the tendency to have intense discomfort with violent or depressing entertainment (ie., movies), the tendency to be sensitive to bright lights and loud noises, and the tendency to be sought out by others on conversations concerning emotions or life experiences (Greiner, 2018). To summarize, because (a) the affected community prioritizes empathy as a possible risk factor for experiencing abuse,

and (b) the lack of scientific investigation on empathy and gaslighting, this construct was selected for further investigation.

### *Self Esteem Relationship Research*

In thinking about the anatomy of a survivor, understanding the role that self-esteem plays in a person's propensity to be gaslit is very important. Previous sections of this paper have suggested a possible relationship between self esteem and narcissistic abuse. Gumpta (2024) notes that those with a low self esteem are often targets for narcissistic abuse. A person with low self esteem may be a viable target for a narcissist for a few reasons. On one hand, they are more likely to make internal attributions against themselves during instances of abuse (thinking for example, *"It is my fault they're acting this way"*). They are less likely to make external attributions in favor of themselves (thinking for example. *"Their actions are neither my fault, nor a reflection of my character"*). The differences in attributions that may be made by someone with a high vs. low self esteem can influence their likelihood to seek help outside of the relationship. Güler et al. (2022) conducted a study on self esteem in the context of intimate partner violence and found that women experiencing intimate partner violence that also had a low self esteem were less likely to seek help concerning the abuse from people in their community. In this way, self esteem functions to keep the survivor trapped within the cycle of narcissistic abuse.

Similar to the pre-existing research on depression and anxiety, low self esteem is considered by research to be a possible consequence of a narcissistic relationship. The most common emotional fallout from abusive relationships is a loss of self esteem (Broxtowe Women's Project, 2024). Fletcher (2024) echoed this observation saying that experiences of abuse, whether in childhood or adulthood, may result in a person having an extremely low and

damaged self esteem. The behaviors involved in narcissistic abuse are noted to “erode [the survivor’s] self-worth, and self-esteem, [while creating] anxiety and self doubt in the person on the receiving end of the narcissist’s behavior” (Dawson, 2023). Low self-esteem is generally considered a probable consequence of experiencing abuse; with that in mind, the hypothesis was structured to see if the same pattern is seen with the presence of an abusive mechanism such as gaslighting.

One study worth mentioning was orchestrated by Karakuş (2012) who was seeking to understand the relationship between childhood abuse and self esteem in adolescence. The findings of this study suggested that emotional abuse during childhood was a significant predictor of low self-esteem in adolescence. This study shows that emotional abuse from an early age can have detrimental impacts on self-esteem long term. A study on the impact of emotional maltreatment on self esteem by Malik & Kaiser (2016) found that emotional maltreatment was a strong predictor of negative self esteem among adolescents. Similarly, this study demonstrates that the effects of abuse on self esteem occur consistently regardless of when in the life of the survivor the abuse occurs. Understanding the role that self esteem plays in the cycle of narcissistic abuse is valuable as the construct lends itself to treatment and an internal locus of control; whereas depression, anxiety, and empathic tendencies may be somewhat outside of the control of a survivor, self esteem is the most readily malleable.

## **Method**

### **Design**

This study was a correlational research design meant to measure the relationship between empathy, self-esteem, anxiety, depression, and a participant’s experience with gaslighting. A

series of self report surveys were obtained to measure these factors, and the subsequent data was analyzed with the use of a Pearson's R Correlation, Linear Regression, and Multivariate Regression.

### **Participants**

The original sample for this study included a total of 504 participants. The data from 125 participants was excluded from the study due to incomplete responses on survey measures; therefore, the sample utilized for data analysis consisted of a total of 379 participants. The participants of this study were recruited in two main ways. One group of participants was enrolled in an undergraduate Psychology course at the University of Colorado Boulder; this group was subsequently recruited from the SONA subject pool. The other group of participants was recruited through solicitation of online forums (ie. Reddit). The specific groups with whom the study was shared were forums created to support survivors of abuse, ranging from narcissistic abuse to broader forms of abuse (ie. emotional, physical, sexual abuse, etc.). This second group was necessary to ensure that data reflected a population that had a greater possibility of experiencing the constructs being studied (ie. gaslighting). Because of the confidential nature of the study, it is not possible to report how many participants came from either group. The sample was composed of 102 men, 262 women, 9 non-binary people, and 2 transgender people. Their ages ranged from 18 to 72 years old ( $M = 30.34$ ,  $s = 12.93$ ). The sample was composed of 315 white participants, 9 Black/African American participants, 22 Asian participants, 4 American Indian/Alaska Native, and 26 participants who identified as Other. As it relates to the sexual orientation 282 participants identified as Straight/Heterosexual, 43 participants identified as Bisexual, 13 identified as Gay/Lesbian, 9 identified as Demisexual, 9 identified as Pansexual, 5 identified as Asexual. Participants who were recruited through the

SONA Subject Pool were incentivized through class credit to take part in the study; all other participants did not receive any incentive to participate.

### **Measures**

Each of the measures in this study were administered through a Qualtrics survey. There are 4 independent variables being measured in this study: empathy, self-esteem, anxiety, and depression. The surveys for this variable yielded continuous data where a higher score indicates a higher level of the construct being measured. There is 1 dependent variable being measured in this study, gaslighting (more specifically the presence of gaslighting in a relationship). The survey for this variable also yielded continuous data where a higher score indicated a higher level of gaslighting present in the relationship.

Spitzer (2006) developed and validated the generalized anxiety scales used in this paper. The Generalized Anxiety Disorder scale (GAD-7) measures the presence and severity of Generalized Anxiety Disorder (GAD) symptoms experienced by participants and the scale consists of seven items. The overall question guiding the GAD-7 scale is “Over the last two weeks, how often have you been bothered by the following problems?”; following the scale’s overall question are seven anxiety related symptoms. Responses to each of these seven items were rated by participants on a 4 point Likert-type scale (0 = “not at all”, 1 = “several days”, 2 = “more than half the days”, 3 = “nearly every day”), with higher numbers indicating a participant reports more frequent experiences in the last two weeks with the GAD symptoms referenced by the statement, and low numbers indicating that a participant had less frequent or nonexistent experiences with a GAD symptom in the past two weeks. An example of one of the statements participants rated is “Feeling afraid, as if something awful might happen”. The scores for each of the seven items were added to calculate a measure of anxiety for each participant ( $\alpha = 0.93$ ).

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (1999) developed and validated the Major Depressive Disorder (MDD) scale used for the research question in this paper. This scale measures the presence of the Major Depressive Disorder symptoms experienced by participants, and the scale consists of 8 items. The overall question guiding the PHQ-9 scale is “Over the last 2 weeks, how often have you been bothered by any of the following problems?”; following the scale’s overall question are eight items relating to depression related symptoms. The question “Thoughts that you would be better off dead or off hurting yourself in some way” was removed from the survey due to the nature of the question. Responses to each of these nine items were rated by participants on a 4 point Likert-type scale (0 = “not at all”, 1 = “several days”, 2 = “more than half the days”, 3 = “nearly every day”), with higher numbers indicating a participant reports more frequent experiences with MDD symptoms in the last two weeks, and low numbers indicating reports less frequent experiences with MDD symptoms in the past two weeks. An example of one of the statements participants rated is “Feeling down, depressed, or hopeless”. The scores for each of the eight items were added to calculate a measure of depression for each participant ( $\alpha = 0.92$ ).

Spreng, RN., et al. (2009) developed and validated the Toronto Empathy Questionnaire (TEQ) scale used for the research question in this paper. This scale measures the emotional responses to situations that depict another person's emotional state as a means of operationalizing empathy (Spreng et al., 2009). The overall guiding question for the scale is “Below is a list of statements. Please read each statement carefully and rate how frequently you feel or act in this manner”. Responses to the sixteen items were rated by participants on a 5 point Likert-type scale (0 = “Never”, 1 = “Rarely”, 2 = “Sometimes”, 3 = “Often”, 4 = “Always”), with higher numbers indicating a participant demonstrates higher levels of empathy and lower scores indicating lower

levels of empathy demonstrated by the participant. An example of one of the statements participants rated is “I get a strong urge to help when I see someone who is upset”. In accordance with how the TEQ was written, 8 items were reverse scored. The scores for each of the statements participants rated were added to calculate a measure for empathy for each participant ( $\alpha = 0.81$ ).

Rosenberg (1965) developed and validated the Rosenberg Self-Esteem Scale used for the research question in this paper. This scale measures enduring feelings of self worth and the overall evaluation of how a person views themselves (positively or negatively). At the beginning of the scale, it states “Below is a list of statements dealing with your general feelings about yourself”; participants are then instructed to indicate how strongly they agree or disagree with each subject (Rosenberg 1965). Responses to the ten items were rated by participants on a 4 point Likert-type scale (1 = “Strongly Disagree”, 2 = “Disagree”, 3 = “Agree”, 4 = “Strongly Agree”), with higher numbers indicating higher reported levels of self esteem and lower numbers indicating lower levels of self esteem. An example of one of the statements participants were asked to rate is “I feel that I have a number of good qualities”. In accordance with how the RSES was written, 5 items were reverse scored. The scores for each of the statements participants rated were added to calculate a measure for self esteem for each participant ( $\alpha = 0.91$ ).

Stern (2007) published *The Gaslight Effect: How to Spot and Survive the Hidden Manipulation Others Use to Control Your Life*, from which the gaslighting scale used for the research paper was derived. This scale measures the extent to which someone has experienced gaslighting in a relationship. At the start of the survey, the participant is instructed to think of one specific relationship; the relationship could be a romantic relationship, family, work, friend, etc.

After thinking of that relationship, they rated it on a scale of 1 to 10, 1 being extremely unhealthy and 10 being extremely healthy; additionally, participants were asked to share any relevant information about the relationship ie., with whom, how long it lasted, etc.). Finally, the overall guiding question for the gaslighting portion of the study is “While thinking about the same relationship you wrote above, read the list of statements below and indicate how strongly you agree or disagree with each statement”. Responses to each of the twenty items were rated by participants on a 4 point Likert-type scale (1 = “Strongly Disagree”, 2 = “Disagree”, 3 = “Agree”, 4 = “Strongly Agree”), with higher numbers indicating higher levels of gaslighting reported in the relationship and lower numbers indicating lower levels of gaslighting reported in the relationship. An example of one of the statements participants were asked to rate is “You are constantly second guessing yourself”. The scores for each of the statements participants rated were added to calculate a measure for gaslighting for each participant ( $\alpha = 0.96$ ).

### **Procedure**

Each participant read and signed an online consent form at the start of the survey before being able to access the rest of the measures in the questionnaires. Survey questions were administered to participants using the online software, Qualtrics (<http://www.qualtrics.com>). Data was then analyzed with the use of the 4.1.0 version of the statistical software R Studio ([www.rstudio.com](http://www.rstudio.com)).

### **Results**

This paper was written from August 24, 2021 to November 12, 2024. Data collection took place from November 18, 2023 to February 4, 2024. The following are results obtained from the study conducted using Qualtrics after data collection. There are 4 independent variables being measured in this study including depression, anxiety, self esteem, and empathy, and 1

dependent variable being gaslighting. The following is the descriptive statistics of each of the variables.

### *Descriptive Statistics*

The independent variable of depression ( $M = 10.41$ ,  $SD = 6.9$ ) had possible scores ranging from 0 to 24, with a 0 being no indicated symptoms of depression, 12 being moderate symptoms of depression, and 24 meaning extreme/high/frequent symptoms of depression. The minimum reported score for depression is 0, the median is 10, and the maximum is 24. The distribution for depression is relatively uniformed with a slight positive skew meaning that there are slightly more scores on the lower end of the scale meaning more scores for less frequent symptoms of depression (see *Figure 1*). The average score of 10.41 suggests that on average people reported moderate levels of depression during the relationship they chose to report on for the study.

The independent variable of anxiety ( $M = 9.56$ ,  $SD = 6.34$ ) had possible scores ranging from 0 to 21, with a score of 0 indicating no symptoms of anxiety in the past 2 weeks, a score of 10 to 11 indicating moderate frequency of symptoms in the past 2 weeks, and 21 indicating extremely frequent symptoms of anxiety. The reported scores ranged from 0 to 21, with a median of 8. The distribution for anxiety is slightly positively skewed, meaning that there are more participants with scores on the lower end of the scale where participants reported less frequent symptoms of anxiety (see *Figure 2*). The average score of 9.56 suggests that on average, participants reported experiencing moderate levels of depression during the relationship they chose to report on for the study.

The independent variable of empathy ( $M = 54.77$ ,  $SD = 5.68$ ) had possible scores ranging from 0 to 64, with a score of 0 indicating no indication of/nonexistent levels of empathy, a score of 32 to 33 indicating moderate levels of empathy, and a score of 64 indicates extremely high levels of empathy. The reported scores ranged from 23 to 64, with a median of 56. The distribution for empathy is negatively skewed, meaning that there are more participants with scores on the upper end of the scale where participants reported higher levels of empathy (Figure 3). The average score of 54.77 suggests that on average participants reported experiencing slightly below moderate levels of empathy during the relationship they chose to report on for the study.

The independent variable of self esteem ( $M = 25.9$ ,  $SD = 6.28$ ) had possible scores ranging from 0 to 40, with a 0 indicating low/nonexistent levels of self esteem, a score of 20 to 21 indicating a moderate self esteem, and 40 indicating an extremely high self esteem. The reported scores ranged from 11 to 40, with a median of 26. The distribution for self esteem is normally distributed, meaning that the majority of the participants score in the middle of the scale where participants reported moderate self esteem levels (Figure 4). The average score of 25.9 suggests that on average participants reported experiencing moderate self esteem levels during the relationship they decided to report on for the study.

The dependent variable of gaslighting ( $M = 47.55$ ,  $SD = 17.26$ ) had possible scores ranging from 0 to 80, with a 0 indicating nonexistent levels of gaslighting in the chosen relationship, a score of 40 to 41 indicating moderate levels of gaslighting, and 80 indicating extremely high levels of gaslighting. The reported scores ranged from 20 to 80, with a median of 49. The distribution for gaslighting is relatively uniform with a slight positive skew, meaning that the participants scored relatively evenly across the scale given the reported range, and there were

slightly more participants scoring on the lower end of the scale where participants reported minimal gaslighting (Figure 5). That said, there is a slight spike in the scores in the upper part of the scale around 60 to 70 suggesting many of the participants were also concentrated around a higher score for gaslighting. The average score of 47.55 suggests that on average participants reported experiencing slightly above moderate levels of gaslighting during the relationship they decided to report on for the study.

**Frequency of Depression Scores**

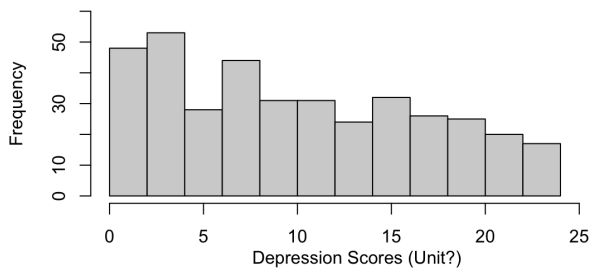


Figure 1

**Frequency of Anxiety Scores**

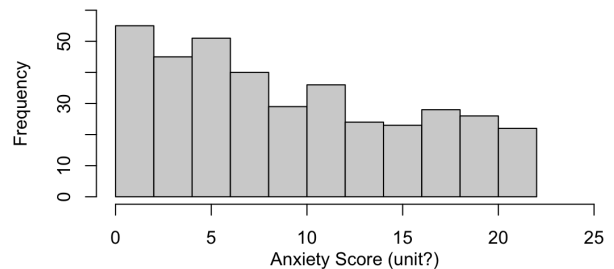


Figure 2

**Frequency of Empathy Scores**

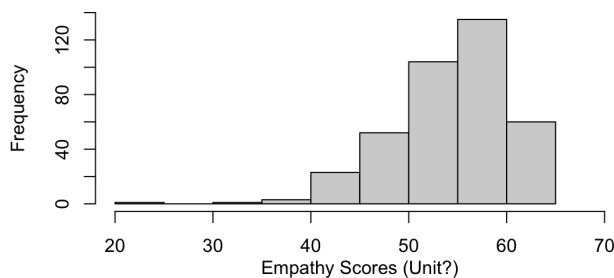


Figure 3

**Frequency of Self Esteem Scores**

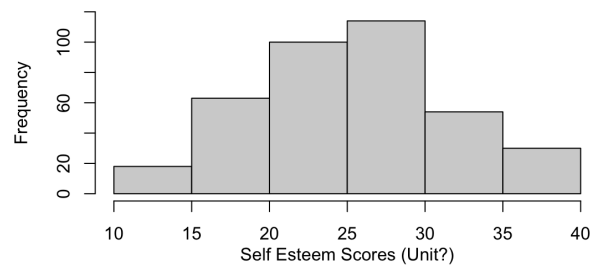


Figure 4

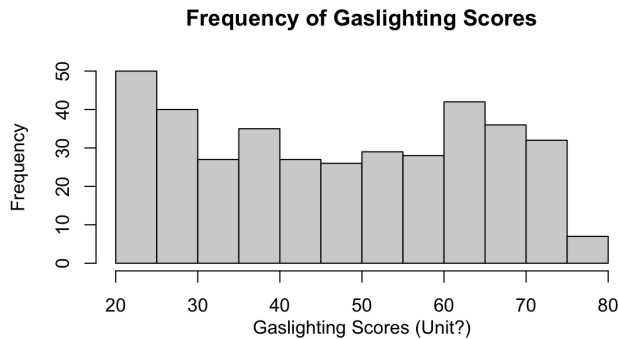


Figure 5

### *Inferential Statistics*

As a reminder, the hypothesis for this study is as follows: It is hypothesized that participants who score higher on the gaslighting measure will also score higher in depression, anxiety, and empathy, but lower in self-esteem. Three separate analyses were run to answer the various parts of this study's hypothesis; those three inferential statistics tests were: 1) Pearson's Correlation, 2) Multiple Regression, 3) Multivariate Correlation.

The first test that was run is Pearson's Correlation analysis. This analysis was used to determine if a relationship existed between each individual independent variable (anxiety, depression, self esteem, empathy), and the dependent variable of the presence of gaslighting in a relationship. All independent variables were significantly correlated with the dependent variable of gaslighting in the hypothesized direction except in the case of empathy.

With regards to the relationship between anxiety and gaslighting, there is a strong positive correlation,  $r(377) = 0.63$ ,  $p < 0.01$ . Based on the results of this test, the part of the hypothesis suggesting that participants scoring higher in the gaslighting measure would also

score higher in anxiety was supported. Additionally, there is evidence for a relationship between depression and gaslighting. There is a strong positive correlation between these two variables,  $r(377) = 0.67, p < 0.01$ . This test supports the part of the hypothesis that suggested that those who score higher in gaslighting will also score higher in depression. With regards to the relationship between empathy and gaslighting, there is a very weak positive correlation,  $r(377) = 0.18, p < 0.01$ . This test weakly supports the part of the hypothesis that suggested that those who score higher in the gaslighting measure would also score higher in empathy. Finally, there is evidence for a relationship between self esteem and gaslighting. There is a moderate negative correlation between these two variables,  $r(377) = -0.56, p < 0.01$ . This test supports the part of the hypothesis that suggested that those who score higher in gaslighting will score lower in self esteem.

The next analysis that was run to test the hypothesis is a Multiple Regression. This test was used to understand the joint relationship of all the independent variables on the dependent variable of gaslighting. The model was significant,  $F(4, 374) = 94.96, p < 0.01$ . The model explains 50% of the variance in gaslighting, with an adjusted  $R^2 = 0.5$ . The following are the results for each independent variable with regards to the Multiple Regression analysis.

Controlling for all other variables, anxiety was a significant predictor of the presence of gaslighting in a relationship,  $\beta = 0.64, p < 0.01$ . We have enough evidence to conclude that anxiety is linearly related to gaslighting,  $r(374) = 3.84, p < 0.01$ . Controlling for all other variables, depression was also a significant predictor of the presence of gaslighting in a relationship,  $\beta = 0.84, p < 0.01$ . Therefore, we have evidence to conclude that depression is linearly related to gaslighting,  $r(374) = 4.86, p < 0.01$ . Still controlling for all other variables, empathy is not a significant predictor of the presence of gaslighting in a relationship,  $\beta = 0.23, p$

> 0.01. Because the statistic was not deemed to be significant, we do not have evidence to conclude that empathy is linearly related to gaslighting,  $r(374) = 0.23$ ,  $p > 0.01$ . It is worth mentioning that the independent variable of empathy is a significant predictor of the presence of gaslighting when  $\beta = 0.23$ ,  $p < 0.05$ , since  $p = 0.04$  for this statistical analysis. Lastly, controlling for all other variables, self esteem was a significant predictor of the presence of gaslighting in a relationship,  $\beta = -0.58$ ,  $p < 0.01$ . We have evidence to conclude that self esteem is linearly related to gaslighting,  $r(374) = -0.58$ ,  $p < 0.01$ .

Finally, after finding significant predictive results, further analysis was done to examine a possible moderating variable. This test was done to investigate whether the reported healthiness/unhealthiness of a relationship strengthened or weakened the hypothesized relationship. It was predicted that perceived health of the relationship would serve as a moderator for the results; it was expected that a healthy relationship will weaken the relationship between the independent variables and gaslighting. Based on the hypothesis, the more unhealthy a relationship is, the stronger the correlation will be for the presence of depression, anxiety, self esteem, empathy alongside gaslighting in the relationship. In converse, the more healthy a relationship is, the weaker the correlation will be for the presence of depression, anxiety, self esteem, and empathy, alongside gaslighting in a relationship. To run this test, each individual independent variable was run through the moderation analysis.

To investigate the potential existence of health of a relationship as a moderator, a regression was run for each predictor. The outcome variable for the analysis was the presence of gaslighting in a relationship. The predictor variables for each separate moderator analysis were the independent variables of depression, anxiety, self esteem, and empathy. The moderator variable evaluated for this analysis was the reported health of the relationship. Participants were

asked to indicate the health of their relationship on a scale of 1-10 (1 being extremely unhealthy, and 10 being extremely healthy). For the purpose of the moderation analysis, scores ranging from 1-5 were categorized as unhealthy, and the remaining scores ranging from 6 - 10 were categorized as healthy. A linear regression analysis was used to test if the health of a relationship strengthened or weakened the relationship between depression, anxiety, self, esteem, and empathy and the presence of gaslighting in a relationship.

There is a significant moderation effect between the presence of anxiety in a relationship and the presence of gaslighting; therefore, the effect of the presence of anxiety in a relationship on the presence of gaslighting in a relationship significantly depends on the health of the relationship,  $r(375) = 0.5$ ,  $p < 0.01$ . Overall, the model describing the moderating relationship between the presence of anxiety in a relationship and the presence of gaslighting in a relationship is significant and explains 69% of the variance,  $F(3, 375) = 278.3$ ,  $p < 0.01$ ,  $R^2 = 0.69$ .

There is a significant moderation effect between the presence of depression in a relationship and the presence of gaslighting; therefore, the effect of the presence of depression in a relationship on the presence of gaslighting significantly depends on the health of the relationship,  $r(375) = 0.55$ ,  $p < 0.01$ . Overall, the model describing the moderating relationship between the presence of depression in a relationship and the presence of gaslighting in a relationship is significant and explains 71% of the variance,  $F(3, 375) = 303.2$ ,  $p < 0.01$ ,  $R^2 = 0.71$ .

There exists a significant moderation effect between the self-esteem of an individual in a relationship and the presence of gaslighting; therefore, the effect of the presence of depression in a relationship on the presence of gaslighting significantly depends on the health of the relationship,  $r(375) = -0.49$ ,  $p < 0.01$ . Overall, the model describing the moderating relationship

between the presence of self esteem in a relationship and the presence of gaslighting in a relationship is significant and explains 65% of the variance,  $F(3, 375) = 236.9$ ,  $p < 0.01$ ,  $R^2 = 0.65$ .

There is no significant moderation effect between how empathetic an individual in a relationship is and the presence of gaslighting; therefore, the effect of empathy on the presence of gaslighting does not significantly depend on the health of a relationship,  $r(375) = -0.34$ ,  $p > 0.01$ . Though there is no significant moderation effect, the model describing the moderating relationship between empathy in a relationship and the presence of gaslighting in a relationship is significant and according to results explains 55% of the variance,  $F(3, 375) = 155$ ,  $p < 0.01$ ,  $R^2 = 0.55$ .

## Discussion

This paper hypothesizes that participants who score higher in gaslighting will also score higher in depression, anxiety, and empathy, but lower in self-esteem. The results of this study indicate that high anxiety, high depression, and low self-esteem were significant predictors of gaslighting in a relationship. Empathy was not, however, found to be a significant predictor of gaslighting in a relationship. For each of the variables with significant results, being in an unhealthy relationship was found to strengthen the hypothesized relationships between the predictors of anxiety, depression, and self esteem and the presence of gaslighting in a relationship.

The results from this study fit within the literature on depression and anxiety's relationship to gaslighting in an abusive relationship. Mazza et al. (2021) suggested that pre-existing mental health conditions cause individuals to be at a higher risk of entering an

abusive situation. Not only did Mazza et al. (2021) cite mental health conditions like anxiety and depression as potential risk factors for abuse, but they were also cited as possible consequences of said abuse. Li et al. (2014) and Tian et al. (2023) demonstrated the significant relationship between emotional abuse and the subsequent development of mental health conditions such as depression; both studies suggested this trend to be true whether the abuse occurred early or later in life. The findings of this study showed that higher levels of depression and anxiety were both significantly correlated with higher levels of gaslighting in a relationship. Because this study was not structured to ask participants to share their depression and anxiety levels prior to the relationship, it is difficult to draw strong conclusions regarding the anatomy of a survivor going *into* an abusive situation. That said, the research is still extremely valuable when it comes to establishing general conclusions surrounding the relationship between depression or anxiety, and gaslighting within the cycle of narcissistic abuse.

The literature surrounding empathy's effect on the presence of gaslighting in a relationship is weak and nearly nonexistent; the findings of this paper do not support empathy as a predictor of gaslighting in a relationship. General research by Abramson (2014) suggested that a person higher in empathy may remain in an abusive relationship because of how empathy is often leveraged by gaslighters. The findings, however, suggest that there is no significant relationship between a person's empathetic tendencies and the presence of gaslighting. This is inconsistent with the mainstream understanding within the survivor community on empathy's role within the cycle of narcissistic abuse. Though this is the case, considering the conclusions drawn by Miano (2021), it is still valuable to engage in further investigation regarding personality traits' correlations with experiencing gaslighting in a relationship. Miano (2021) found a correlation between personality traits such as antagonism, disinhibition, and

psychoticism and the propensity to be on the receiving end of gaslighting behaviors. This shows that there is grounds for attempting to draw a relationship between personality traits and the anatomy of a survivor. While empathy was not found to be a significant predictor of gaslighting in a relationship through the results of this study, further studies are encouraged in order to further investigate a possible association<sup>10</sup>.

The results from this study fit within the literature on self-esteem's relationship to gaslighting in an abusive relationship. Gumpta (2024) generally suggested that those with a low self-esteem are targets for narcissistic abuse. Karakuş' (2012) study showed the connection between childhood abuse and low self esteem in adolescence; similarly, Malik & Kaiser's (2016) study found the same relationship between emotional maltreatment and negative self-esteem. Ultimately, the foundational literature suggests that regardless of when the abuse took place, it has significant implications for the resulting self esteem of a survivor. The findings fit into the pre-existing research as this study found that higher levels of gaslighting in a relationship were correlated with lower levels of self-esteem. Because this study was not structured to ask participants to share their self-esteem levels prior to the relationship, it is challenging to draw strong conclusions regarding the anatomy of a survivor going into an abusive situation; however, the research is still extremely valuable with establishing general conclusions surrounding self-esteem and gaslighting in narcissistic abuse.

### **Limitations and Future Directions**

The first limitation of this study is the low external validity due to the demographics of the participants in the study. The study was composed primarily of undergraduates from the

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<sup>10</sup> It would be interesting to investigate whether empathy is a significant predictor of gaslighting in a relationship when a person has a low self-esteem (moderation analysis structure).

University of Colorado Boulder; this implicitly limits the age range generally to college age (about 18 to 22). It also tacitly limits the study to responses from people from a certain socioeconomic status. The sample is not nationally representative of race in America (ie., roughly 9% of the population is Black, but only 2% of the sample is from a Black respondent), making it very challenging to empirically apply the findings to the unique challenges that show up for racial minorities experiencing this form of abuse. Similarly, there simply were not enough respondents from responses representing sexual minorities (ie., 2% of respondents were non-binary), and therefore the research is limited in its ability to account for the added nuance to the experiences of a member of the LGBTQ+ community experiencing gaslighting. Future studies should pursue a more representative sample so as to obtain results that can be used to provide nuanced conclusions that apply to people of all backgrounds.

Another limitation of this study is related to challenges that come with collecting self-reported data. Because data collection relied solely on self-report measures, it is possible that personal biases such as social desirability bias may have influenced the way that participants answered questions. For example, a person influenced by social desirability may respond to questions on the empathy scale in a way that indicates higher levels of empathy even if that is not the case in real life. The introspective ability of participants to accurately assess themselves is another limitation of self report measures. Relatedly, due to the nature of this particular form of abuse, the responses of a person currently or previously having experienced gaslighting may be inaccurately skewed due to their lost self-trust from the abuse. Future studies could still include self-report information as they still provide valuable insight into the minds of participants. Still, studies in the future could aim to reduce the possibility of social desirability bias or challenges

with introspective ability by designing longitudinal observational studies that directly observe the different behaviors as they are happening.

Another limitation of the study is the means through which the moderator, health of a relationship, was operationalized. Participants were asked to self-report their perceived health of the relationship on a scale of 1 to 10, and from that score relationships were put into either the unhealthy relationship group (1 - 5), or the healthy relationship group (6 - 10). Though this is valuable information, it's possible that people's perceptions of their relationship's health was incongruent with the actual health of the relationship. As a result, in future studies a different scale could be used to measure the health of the relationship. One possible option is Hendrick et al.'s (1998) Relationship Assessment Scale (RAS) that measures general relationship satisfaction. The use of a scale of this nature could provide more accurate results regarding the health of a relationship, and it could be further correlated with the same or different variables.

The correlational design used to study the hypothesis of this study comes with limitations regarding the types of conclusions that can be drawn from this study. Classically, correlational studies are unable to directly predict causation; therefore, though a relationship was found between several variables, gaslighting cannot be deemed as a definite cause of any of the measures in this study. Kumari (2020) comments on emotional abuse and future methods of prevention saying that "there is a need to move beyond correlational research, and shift our focus to sophisticated multimodal studies to fully understand the psychobiological mechanisms underlying these associations". Future studies should focus on utilizing appropriate experimental designs to study constructs such as gaslighting. The original idea for this study was one of an experimental design, where participants would have been divided into a control group (receiving regular treatment), and an experimental group (receiving gaslighting treatment). This would have

been a blind experiment where participants were asked to answer questions about a story shared during the experiment. Those in the experimental group would be told that they answered the question incorrectly regardless of a correctly provided response; the instructor in the study, who would serve as a confederate in this case, would (if asked) confirm that they'd answered the question incorrectly, in turn simulating gaslighting in a relationship. The goal of such a study would be to measure changes in the participants' self trust and confidence in their memory; physiological data could also be gathered to see what is happening at a biological level during gaslighting. This is a preliminary idea for possible experimental design used to further study gaslighting and the general world of narcissistic abuse; further experiments could be designed to continue research beyond the correlational level.

Similar to previously described concerns with study design, another limitation of this study is its inability to confidently assert the anatomy of a survivor. This study was invested in helping to shed light on the anatomy of a survivor - that is, the personality, behavioral tendencies, and psychological makeup of someone vulnerable to the cycle of narcissistic abuse. While this study asks participants to generally report anxiety, depression, and self esteem's levels during a relationship of choice, it doesn't distinguish between anxiety, depression, and self esteem that existed prior to entering the relationship and conditions that onset *after* the start of the relationship. Because of this, general conclusions can be drawn regarding depression, anxiety, and low self-esteem and their relationship to gaslighting, but the same cannot be confidently said for conclusions related to the pre-existing anatomy of a survivor. To better assess and obtain empirical data about the anatomy of a survivor, future studies could utilize longitudinal study designs where personality traits and psychiatric conditions are tracked prior to, during, and following the study.

This study was not heavily concerned with distinguishing between the different types of narcissistic relationships (ie., romantic, familial, platonic, work, etc.) throughout data collection and analysis, and this is another possible limitation. Though participants were asked to describe the nature of the relationship they were thinking of for the study, this data was not emphasized during data analysis. Because of this, analysis of gaslighting trends with each of the predictors was combined together causing much nuance to be lost. Future studies could be designed to separately study the gaslighting in narcissistic abuse for different types of narcissistic relationships. This would be beneficial to indicate whether gaslighting has different implications depending on the nature of the narcissistic relationship dynamic, or whether effects are universal.

Another key limitation of this study is the distinct lack of a strong research foundation regarding narcissistic abuse and the related constructs. Because the study of narcissistic abuse is still relatively early in its development, it was very challenging to find research from academic journals on the relationship between gaslighting and the predictors of depression, anxiety, self-esteem, and empathy. Even though valuable research from experts in the field was available for the purposes of this paper, more theoretical studies on this subject are needed to create a better foundation for further correlational and experimental research. Future studies designed to provide a better theoretical framework for research on the cycle of narcissistic abuse is necessary in order to correct the profound lack of academic language needed to describe the constructs within narcissistic abuse.

An added limitation of this study is the way empathy was operationalized in the study. This is similar to the conversation around the use of self report measures. Empathy is an extremely complex construct that still has yet to be understood in an empirical sense. The study on mirror neurons and their role in empathy is still emerging, but if it were developed further, it

could create a direct measure of empathy in a survivor (measured perhaps through brain activity or other scientific methods). That way, rather than relying on self-reported empathy, such a construct could be directly and reliably measured. This would require future foundational studies on empathy that are specifically focused on identifying how neural networks are related to empathy. Future studies could also study empathy not just as a possible risk factor for abuse but a possible resilience factor. Sodoma (2022) identifies “affective empathy” as a key antidote to emotional gaslighting (p. 320). Sodoma (2022) defines empathy as “the process in which an empathizer imaginatively engages with another person’s situation from their point of view and thereby comes to recreate the target person’s perspective in imagination”; the ‘affective’ part of affective empathy “further requires that the empathizer comes to experience an emotional reaction to the imagined scenario [that is identical to the person with whom they are empathizing]” (p. 320). The reason affective empathy is cited as a possible antidote to gaslighting is because of how it “reassures a target in their ability to make evaluative judgements based on their emotional reactions” (Sodoma, 2022, p. 320). Given this information, it is necessary to further the study on how empathy plays a role in someone’s susceptibility to certain forms of abuse, but also how empathy could be a possible springboard for healing.

A final limitation of this research study is the scope doesn’t directly explore or evaluate possible treatment and prevention strategies for survivors of narcissistic abuse. Loring (1994) investigates the trauma of emotional abuse, and the subsequent loneliness and sadness that may occur causing disruptions in the lives of survivors. Though this study did attempt to identify possible consequences of gaslighting like the ones suggested by Loring (1994), the study wasn’t specifically devoted to developing treatment options or measuring what interventions are the most effective for survivors. Later in this section, this paper will still suggest possible means of

prevention and treatment based on takeaways from the study, but in future studies, it would be beneficial to study prevention and treatment methods through both correlational and experimental designs.

### **Implications**

There are several different implications for the findings of this study: 1) micro-level implications, and 2) macro-level implications. Micro-level implications are ones that relate to a direct application of the findings on an individual level. This may include implications on the effects of gaslighting on a survivor on the dimensions of depression, anxiety, empathy, and self esteem. It may also include implications on how the study of narcissistic abuse should be approached moving forward, or recommended avenues for prevention and treatment strategies. Macro-level implications are indirect takeaways that use lessons learned at an individual level about narcissistic abuse as a means of understanding social level abuse (ie. racism). While macro-level implications will not be elaborated upon further due to the scope of this paper, they are important to consider as indirect lessons that can be gathered from the study.

#### *Micro-Level Implications*

At the individual level, this data has implications regarding the anatomy of a survivor. While findings were unable to indisputably suggest a solidified profile of someone that may be vulnerable to narcissistic abuse (ie., personality traits, behavioral tendencies, psychological make-up), there is still reason to believe that certain factors can make a person more or less likely to find oneself trapped in an abusive situation. Emotional violence is estimated to be the most common form of intimate partner violence across all continents worldwide (Mazza et al.,

2021). Therefore, understanding that a psychiatric condition such as depression or anxiety may predispose a person to experiencing abuse is very important because it aids in self-awareness that may be necessary to prevent the abuse in the first place. Access to such information may support the resilience of people that fit the description, by giving them related knowledge about what narcissistic patterns of abuse to look for and avoid when entering a new relationship.

Even though the anatomy of a survivor has already been discussed, it is additionally important to note the implications related to empathy. As has been suggested previously in this paper, having knowledge of what personality traits lead a person to be more vulnerable to forms of emotional abuse is extremely valuable for building up resilience against narcissistic abuse. Given the lack of clarity concerning empathy's relationship with gaslighting, there is a possible misconception within the community of survivors regarding what traits are attracting narcissistic relationships. That is not to say that those targeted for the cycle of narcissistic abuse are not empathetic individuals, but instead to say that it's possible that a different trait is contributing to the inability to escape the dynamic<sup>11</sup>. The solidarity found on anonymous online forums within the community of survivors is deeply valuable for the healing of survivors as these forums provide a space to experience affective empathy and validation from other survivors. That said, a major implication for survivors is to consider the possibility that empathy in tandem with other personality traits (ie., empathy *and* self esteem) may serve as viable explanations that could help break the cycle.

Findings related to self-esteem provide a possible direction for treatment, and promote resilience by allowerr survivors to shift to an internal locus of control with regards to the pursuit

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<sup>11</sup> To clarify, this is a blanket statement used for simplicity of argument directly related to personality's role in narcissistic abuse and gaslighting. It is not intended to underemphasize the challenge of leaving an abusive relationship; the scope of this paper does not cover other methods of narcissistic abuse that keep survivors trapped in the cycle of narcissistic abuse that are vastly outside of their direct control (ie., physical threats or intimidation, financial abuse, etc).

of healthy connections. It's important to use the knowledge procured from the anatomy of a survivor to create an increased awareness of the factors that may make them a target for abusive individuals; that said, because depression or anxiety may be psychiatric conditions passed down genetically, it's fair to say that while a person may possess the knowledge, it may be outside of their control to immediately eliminate the risk factor. If significant results were obtained with empathy one still wouldn't simply want to shut down their empathetic tendencies in order to avoid being a target of abuse (referenced despite the lack of significant results simply to better illustrate a point). Self esteem, on the other hand, is something that every person has the capacity to work on; out of all of the variables proposed in this study, self-esteem is the one that a person arguably has the most control over. Based on the results, increasing self esteem could be a means of increasing resiliency against narcissistic abuse. Now, rather than a survivor's locus of control being solely external,<sup>12</sup> considering things from the standpoint of self-esteem may allow survivors to shift to an internal locus of control where they believe that in building their self-esteem can support their resilience against entering an abusive relationship dynamic. The findings point to possible prevention and treatment interventions that are self-esteem driven.

Another important implication of these findings is the unique manner in which the study of narcissistic abuse needs to be approached to uncover nuance. Howard (2022) identifies narcissistic abuse as having a “distinct lack of research into the behaviors individuals with severe narcissistic traits use against others and the subsequent [abuse] victims experience” (p. 82). Howard (2022) describes narcissistic abuse as “an intricate maze of experiences and definitions” that is “immediately relatable [for those who have experienced it]” (p. 102). Part of what keeps narcissistic abuse and related patterns such as gaslighting under-recognized within helping professions, is the fact that often the abuse is so subtle that survivors face challenges identifying

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<sup>12</sup> Meaning they believe that experiences with narcissistic abuse are completely outside of their control.

and communicating the [abuse] they have undergone (Howard, 2022, p. 82). Given that narcissistic abuse is an underrecognized form of domestic violence, Howard (2022) emphasizes the importance of autoethnographies as a means of investigating this niche form of abuse (p. 91). According to Howard (2022), autoethnographies allow for the consideration of “more subtle and covert processes that occur between narcissistic abusers and those they target” (p. 92). So, alongside attempts to more strictly define and measure constructs like gaslighting through correlational and experimental studies, the implication is that a valuable tool for uncovering more about narcissistic abuse is a more open-minded, personalized and abstract<sup>13</sup> (that is, relatively speaking) methodology such as in the case of autoethnographies is required.

Not only is a more abstract approach necessary to truly capture the nuances of narcissistic abuse, but identically, open-ended forms of treatment are also vital for survivors to heal. Howard (2022) utilizes a nontraditional approach by including poetry and storytelling as a part of the investigation which, similar to autoethnographies, is valuable *specifically* in the investigation of narcissistic abuse it provides evidence that is familiar to survivors (given the subtle nature of their own experiences) as well as those with a highly developed understanding of narcissistic abuse patterns (2022, p. 87). When a survivor reads a piece illustrating an aspect of abuse, it tends to resonate due to their own personal experience thereby leading to further opportunities for investigation. Seeing as this journal is an autoethnography, Howard (2022) recounts her process of healing which began with finding out about narcissistic abuse, and also included coming across social media pages dedicated to survivors that reflected her own experiences; she also recounts the process of receiving support from family and friends, and seeking counsel from a women’s domestic abuse case worker (p. 94). The use of personal narratives is valuable to

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<sup>13</sup> In this way, the paper comes full circle to the initially abstract nature of the understanding of narcissism through the myth of Narcissus, and even the 1944 movie “Gaslight” used to illustrate gaslighting in action.

those actively healing from the effects of narcissistic abuse. The act of writing one's story is a tool to rebuild self-trust and practice self validation – two things that are repeatedly damaged throughout the cycle of narcissistic abuse. Other forms of art including poetry, fictional storytelling, music creation and the like are also mediums through which healing may be pursued. The use of personal narratives in various art forms is also valuable to others outside of the author, for the beauty is when another survivor finds that art and is able to resonate with the message, healing blooms in their heart as well and the process of self-validation begins again<sup>14</sup>. Ultimately, both the study and pursuit of healing from narcissistic abuse require open-ended strategies that serve to uncover the subtleties of abuse.

### **Conclusion**

Domestic violence is highly prevalent in our society; in the case of physical abuse, damage is often visible, but with emotional abuse the cascading effects are typically invisible to the naked eye. This is especially true from a highly specific form of emotional abuse called narcissistic abuse. While narcissistic abuse typically refers to abuse at the hands of a person with Narcissistic Personality Disorder, a person can suffer abuse without being involved with a clinically diagnosed narcissist. The cycle of narcissistic abuse involves several constructs unique to this form of abuse such as triangulation, hoovering, love bombing, and gaslighting – the latter being the chosen focus of this study. Gaslighting is a manipulation tactic that is used to control another party by causing them to doubt their perceptions of reality. In the study, gaslighting was correlated with the constructs of depression, anxiety, empathy, and self esteem. Results revealed

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<sup>14</sup> Collective healing among multiple survivors of narcissistic abuse may be pursued when survivors and supportive persons come together to productively engage with a survivor's story.

that all constructs were significantly correlated with the presence of gaslighting except for the personality trait of empathy.

This study provides different takeaways for researchers seeking to further investigate the study of narcissistic abuse, survivors seeking to recover from emotional violence, and even third parties seeking to support the recovery and resilience of survivors in their communities. There isn't enough research regarding the anatomy of a survivor – including the personality types that find themselves in these relationships. By scientifically identifying what type of person might find themselves in an abusive relationship, an opportunity would be created to help people to be more self aware going into a relationship with preventative tools and a resilient mindset. Further investigating the study of narcissistic abuse will give survivors vocabulary to adequately name and describe their experiences; pursuing this research must be done with a combination of experimental and correlational designs as well as more open-ended methods such as autoethnography. Survivors should be encouraged to rebuild the self trust lost from the effects of gaslighting through the use of creative self expression in the form of personal and fictional narrative, poetry, music creation, and the like. Supporters of survivors of narcissistic abuse can best increase resilience by meeting affected persons with affective empathy and compassionate validation of experiences. Ultimately, the takeaways of this study go beyond what can be explicitly deduced from results. Patterns seen within narcissistic abuse are not unique to micro-level cycles of abuse and instead are repeated at the social level to reinforce the systems of racism in America. By applying lessons learned at the micro-level concerning gaslighting, valuable takeaways can be had to minimize the harm done towards People of Color. Intersectional identities are the key to healing the brokenness in this world, and so to uplift and

empower these identities, compassion, kindness, and empathy must be reinfused into the fabric of our science, structures, and, most importantly, society.

## Appendix

### Appendix A - GAD-7 Scale

Over the last two weeks, how often have you been bothered by the following problems?

This is calculated by assigning scores of 0, 1, 2, and 3 to the response categories, respectively, of “not at all,” “several days,” “more than half the days,” and “nearly every day.” GAD-7 total score for the seven items ranges from 0 to 21.

1. Feeling nervous, anxious, or on edge
2. Not being able to stop or control worrying
3. Worrying too much about different things
4. Trouble relaxing
5. Being so restless that it is hard to sit still
6. Becoming easily annoyed or irritable
7. Feeling afraid, as if something awful might happen

0–4: minimal anxiety

5–9: mild anxiety

10–14: moderate anxiety

15–21: severe anxiety

Appendix B - PHQ-9 Scale

Over the last 2 weeks, how often have you been bothered by any of the following problems? Using scores of 0, 1, 2, 3 to indicate, respectively, not at all, several days, more than half the days, nearly every day.

1. Little interest or pleasure in doing things
2. Feeling down, depressed, or hopeless
3. Trouble falling or staying asleep, or sleeping too much
4. Feeling tired or having little energy
5. Poor appetite or overeating
6. Feeling bad about yourself – or that you are a failure or have let yourself or your family down
7. Trouble concentrating on things, such as reading the newspaper or watching television
8. Moving or speaking so slowly that other people have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual.

If you have checked off any of the problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with others?

- Not difficult at all
- Somewhat difficult
- Very difficult
- Extremely difficult

Appendix C - Self Report Measure of Empathy

Below is a list of statements. Please read each statement *carefully* and rate how frequently you feel or act in the manner described. Circle your answer on the response form. There are no right or wrong answers or trick questions. Please answer each question as honestly as you can.

1. When someone else is feeling excited, I tend to get excited too
2. Other people's misfortunes do not disturb me a great deal
3. It upsets me to see someone being treated disrespectfully
4. I remain unaffected when someone close to me is happy
5. I enjoy making other people feel better
6. I have tender, concerned feelings for people less fortunate than me
7. When a friend starts to talk about his/her problems, I try to steer the conversation towards something else
8. I can tell when others are sad even when they do not say anything
9. I find that I am "in tune" with other people's moods
10. I do not feel sympathy for people who cause their own serious illnesses
11. I become irritated when someone cries
12. I am not really interested in how other people feel
13. I get a strong urge to help when I see someone who is upset
14. When I see someone being treated unfairly, I do not feel very much pity for them
15. I find it silly for people to cry out of happiness
16. When I see someone being taken advantage of, I feel kind of protective towards him/her

*Scoring* Item responses are scored according to the following scale for positively worded Items 1, 3, 5, 6, 8, 9, 13, 16. Never = 0; Rarely = 1; Sometimes = 2; Often = 3; Always = 4. The following negatively worded items are reverse scored: 2, 4, 7, 10, 11, 12, 14, 15. Scores are summed to derive total for the Toronto Empathy Questionnaire

Appendix D - Rosenberg Self-Esteem Measure

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

1. On the whole, I am satisfied with myself.
2. At times I think I am no good at all.
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I certainly feel useless at times.
7. I feel that I'm a person of worth, at least on an equal plane with others.
8. I wish I could have more respect for myself.
9. All in all, I am inclined to feel that I am a failure.
10. I take a positive attitude toward myself.

Items 2, 5, 6, 8, 9 are reverse scored. Give “Strongly Disagree” 1 point, “Disagree” 2 points, “Agree” 3 points, and “Strongly Agree” 4 points. Sum scores for all ten items. Keep scores on a continuous scale. Higher scores indicate higher self-esteem.

Appendix E - Gaslighting Measure

Think about the most healthy [unhealthy] relationship you've had in your life, past or present (healthy as characterized by a sense of trust, openness, respect, communication and safety in a relationship [unhealthy as characterized by a sense of distrust, disrespect, lack of communication, power imbalance, abuse, and overall unsafety in the relationship]). Below, please describe the relationship you have in mind including the nature of the relationship (romantic, work, family, etc.), length of the relationship, and any other pertinent details (ie., what made the relationship healthy [unhealthy]).

On a scale of 1 to 10 how healthy [unhealthy] would you rate this relationship, with 1 being not at all healthy [not at all unhealthy] and 10 being extremely healthy [extremely unhealthy].

1. You are constantly second-guessing yourself
2. You ask yourself, “Am I too sensitive?” a dozen times a day
3. You often feel confused and even crazy at work.
4. You're always apologizing to your mother, father, significant other, friend, or boss.
5. You wonder frequently if you are a “good enough” girlfriend/boyfriend/wife/husband/employee/friend/daughter/son.
6. You can't understand why, with so many apparently good things in your life, you aren't happier.

7. You buy clothes for yourself, furnishings for your apartment, or other personal purchases with your partner in mind, thinking about what they would like instead of what would make you feel great.
8. You frequently make excuses for your partner's behavior to friends and family
9. You find yourself withholding information from friends and family so that you don't have to explain or make excuses
10. You know something is terribly wrong [about your relationship], but you can never quite express what is, even to yourself.
11. You start lying to avoid the put-downs and reality twists
12. You have trouble making simple decisions

### References

- Abramson, K. (2014). Turning up the lights on gaslighting. *Philosophical Perspectives*, 28(1), 1–30. <https://doi.org/10.1111/phpe.12046>
- American Psychological Association. (2018a, April 19). *APA dictionary of psychology: Emotional abuse*. <https://dictionary.apa.org/emotional-abuse>
- American Psychological Association. (2018b, April 19). *APA Dictionary of Psychology: Physical abuse*. APA Dictionary of Psychology. <https://dictionary.apa.org/physical-abuse>
- Beri, R. (2024, June 16). *Love Bombing and Emotional Abuse among College Students*. <https://psychopediajournals.com/index.php/ijiap/article/view/484>
- Brady, E. U., & Kendall, P. C. (1992). Comorbidity of anxiety and depression in children and adolescents. *Psychological Bulletin*, 111(2), 244–255. <https://doi.org/10.1037/0033-2909.111.2.244>
- Brazier, Y. (2023, October). *All about narcissistic personality disorder*. Medical News Today. <https://www.medicalnewstoday.com/articles/9741>
- Broxtowe Women’s Project. (2024). *How your self esteem can be affected following an abusive relationship*. <https://broxtowewomensproject.org.uk/how-self-esteem-can-be-affected-by-an-abusive-relationship/#:~:text=The%20most%20common%20emotional%20fallout,take%20its%20toll%20over%20time>.
- Caligor, E., Levy, K. N., & Yeomans, F. E. (2015). Narcissistic Personality Disorder: diagnostic and clinical challenges. *American Journal of Psychiatry*, 172(5), 415–422. <https://doi.org/10.1176/appi.ajp.2014.14060723>

Campbell, L. (2023, December 6). *What is an empath and how do you know if you are one?*

Verywell Mind.

<https://www.verywellmind.com/what-is-an-empath-and-how-do-you-know-if-you-are-on-e-5119883>

Cleveland Clinic. (2024, June). *What is hoovering? 7 signs and how to handle it.*

<https://health.clevelandclinic.org/hoovering>

Davis, A. M., & Ernst, R. (2017). Racial gaslighting. *Politics Groups and Identities*, 7(4),

761–774. <https://doi.org/10.1080/21565503.2017.1403934>

Davis, A. M., & Ernst, R. (2020). Racial gaslighting. In *Routledge eBooks* (pp. 47–60).

<https://doi.org/10.4324/9781003119722-6>

Dawson, A., MBACP. (2023). *Narcissistic abuse and self esteem*. Counselling Directory.

<https://www.counselling-directory.org.uk/memberarticles/narcissistic-abuse-and-self-esteem>

Dickson, P., Ireland, J. L., & Birch, P. (2023). Gaslighting and its application to interpersonal violence. *Journal of Criminological Research Policy and Practice*, 9(1), 31–46.

<https://doi.org/10.1108/jcrpp-07-2022-0029>

England, A. (2023, July 14). *What the term ‘Flying monkeys’ means when we talk about narcissism*. Verywell Mind.

<https://verywellmind.com/narcissists-and-flying-monkeys-7552473#:~:text=When%20people%20discuss%20narcissists%2C%20they,flying%20monkeys%20under%20her%20spell.>

Field, B. (2023, April). *The dangers of love bombing*. Verywell Mind.

<https://www.verywellmind.com/what-is-love-bombing-5223611>

- Fletcher, J. (2024, September 4). *What are the effects of emotional abuse?*  
<https://www.medicalnewstoday.com/articles/327080>
- Gillette, H. (2022, February). *Are you experiencing emotional abuse and not aware of it?* Psych Central. <https://psychcentral.com/lib/emotional-abuse-signs#what-to-do>
- Greiner, J. (2018). *Empath: Understanding Your Gift, Protecting Your Energy and Finding Peace in a Chaotic World*. Createspace Independent Publishing Platform.
- Güler, A., Bankston, K., & Smith, C. R. (2022). Self-esteem in the context of intimate partner violence: A concept analysis. *Nursing Forum*, 57(6), 1484–1490.  
<https://doi.org/10.1111/nuf.12798>
- Gupta, S. (2022, August 15). *What is the narcissistic abuse cycle?* Verywell Mind.  
<https://www.verywellmind.com/narcissistic-abuse-cycle-stages-impact-and-coping-6363187>
- Hendrick, S. S., Dicke, A., & Hendrick, C. (1998). The Relationship Assessment scale. *Journal of Social and Personal Relationships*, 15(1), 137–142.  
<https://doi.org/10.1177/0265407598151009>
- Holland, M., MA, MHP, LMHC. (2023). *Narcissistic triangulation: definition, examples, & how to respond*. Choosing Therapy. <https://choosingtherapy.com/narcissistic-triangulation/>
- Howard, V. (2022). (Gas)lighting Their Way to Coercion and Violation in Narcissistic Abuse. *Journal of Autoethnography*, 3(1), 84–102. <https://doi.org/10.1525/joae.2022.3.1.84>
- Karakuş, Ö. (2012). Relation between childhood abuse and self esteem in adolescence. *Journal of New Results in Science*, 9(2), 753–763.  
[https://www.arastirmax.com/en/system/files/dergiler/161047/makaleler/9/2/arastirmx\\_161047\\_9\\_pp\\_753-763.pdf](https://www.arastirmax.com/en/system/files/dergiler/161047/makaleler/9/2/arastirmx_161047_9_pp_753-763.pdf)

- Kumari, V. (2020). Emotional abuse and neglect: time to focus on prevention and mental health consequences. *The British Journal of Psychiatry*, *217*(5), 597–599.  
<https://doi.org/10.1192/bjp.2020.154>
- Lebow, H. I. (2023, January 7). *What is healthy narcissism?* Psych Central.  
<https://psychcentral.com/disorders/what-is-healthy-narcissism#lets-recap>
- Levy, N. K. N., Ellison, W. D., & Reynoso, J. S. (2011). A historical review of narcissism and narcissistic personality. *JOURNAL?*, 1–13. <https://doi.org/10.1002/9781118093108.ch1>
- Li, E. T., Carracher, E., & Bird, T. (2019). Linking childhood emotional abuse and adult depressive symptoms: The role of mentalizing incapacity. *Child Abuse & Neglect*, *99*, 104253. <https://doi.org/10.1016/j.chiabu.2019.104253>
- Malik, S., & Kaiser, A. (2016). Impact of emotional maltreatment on self esteem among adolescents. *PubMed*, *66*(7), 795–798. <https://pubmed.ncbi.nlm.nih.gov/27427124>
- Mazza, M., Marano, G., Del Castillo, A. G., Chieffo, D., Monti, L., Janiri, D., Moccia, L., & Sani, G. (2021). Intimate partner violence: A loop of abuse, depression and victimization. *World Journal of Psychiatry*, *11*(6), 215–221. <https://doi.org/10.5498/wjp.v11.i6.215>
- Miano, P., Bellomare, M., & Genova, V. G. (2021). Personality correlates of gaslighting behaviours in young adults. *Journal of Sexual Aggression*, *27*(3), 285–298.  
<https://doi.org/10.1080/13552600.2020.1850893>
- Nall, R., MSN, CRNA. (2020). *What are the long-term effects of gaslighting?*  
<https://www.medicalnewstoday.com/articles/long-term-effects-of-gaslighting#gaslighting-examples>
- Project Sanctuary*. (2024). <https://www.projectsanctuary.org/>

Prusko, M. (2023). *The eight types of narcissists*. The Family Institute.

<https://www.family-institute.org/behavioral-health-resources/eight-types-narcissists>

Psychology Today. (2024). *Gaslighting*.

<https://www.psychologytoday.com/us/basics/gaslighting#:~:text=Gaslighting%20is%20an%20insidious%20form,perception%2C%20and%20even%20their%20sanity.>

Resnick, A. (2024, February 27). *Understanding trauma bonding*. Verywell Mind.

<https://www.verywellmind.com/trauma-bonding-5207136>

Ronningstam, E. (2010). Narcissistic Personality Disorder: A Current review. *Current Psychiatry Reports*, 12(1), 68–75. <https://doi.org/10.1007/s11920-009-0084-z>

*Reports*, 12(1), 68–75. <https://doi.org/10.1007/s11920-009-0084-z>

Sissons, B. (2022, October). *What is narcissistic abuse and what are the signs?*

<https://www.medicalnewstoday.com/articles/narcissistic-abuse#narcissism>

Sodoma, K. A. (2022). Emotional gaslighting and affective empathy. *International Journal of Philosophical Studies*, 30(3), 320–338. <https://doi.org/10.1080/09672559.2022.2121894>

*Philosophical Studies*, 30(3), 320–338. <https://doi.org/10.1080/09672559.2022.2121894>

Spear, A. D. (2019). Epistemic dimensions of gaslighting: peer-disagreement, self-trust, and epistemic injustice. *Inquiry*, 66(1), 68–91.

<https://doi.org/10.1080/0020174x.2019.1610051>

Sprengh, R. N., McKinnon, M. C., Mar, R. A., & Levine, B. (2011). The Toronto Empathy

Questionnaire: Scale development and Initial Validation of a Factor-Analytic Solution to Multiple Empathy Measures. *Journal of Personality Assessment*, 91(1), 62–71.

<https://doi.org/10.1080/00223890802484381>

Sussex Publishers LLC. (2024). *Emotional abuse*. Psychology Today.

<https://www.psychologytoday.com/us/basics/emotional-abuse>

Suxena, S., MBA, MSW, LSW, CCTP, OSW-C. (2024, July 8). *What is a narcissistic abuse cycle & how does it work?* Choosing Therapy.

<https://www.choosingtherapy.com/narcissistic-abuse-cycle/>

Tian, L., Zhou, Z., & Huebner, E. S. (2023). Association between emotional abuse and depressive symptoms in Chinese children: The mediating role of emotion regulation. *Child Abuse & Neglect*, 139, 106135. <https://doi.org/10.1016/j.chiabu.2023.106135>

Upton, S. (2023). *Narcissistic Abuse Research* | PledgeMe. PledgeMe.

<https://www.pledgeme.co.nz/projects/7501-narcissistic-abuse-research>

U.S. Department of Veterans Affairs. (2022). *PTSD: National Center for PTSD*.

[https://www.ptsd.va.gov/understand/related/depression\\_trauma.asp](https://www.ptsd.va.gov/understand/related/depression_trauma.asp)

Weinberg, I., & Ronningstam, E. (2022). Narcissistic Personality Disorder: Progress in understanding and treatment. *FOCUS the Journal of Lifelong Learning in Psychiatry*, 20(4), 368–377. <https://doi.org/10.1176/appi.focus.20220052>

Winerman, L. (2005, October). *The mind's mirror*. <https://www.apa.org>.

<https://www.apa.org/monitor/oct05/mirror>