# The Association between Grandiose and Vulnerable Narcissism and the Acceptance of Gaslighting in Intimate Relationships

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#### Abstract

The present study aimed to find out if the subtypes of narcissism (grandiose/vulnerable) are associated with the acceptance of gaslighting in intimate relationships and if gender moderates this relationship. The present study employed a quantitative, cross-sectional design, comprising a final sample size of 169 participants (71% female, 29% male) with a mean age of 26.6 (SD = 11.97). The Gaslighting Questionnaire was used to measure the acceptance of gaslighting, and the Super-Brief Pathological Narcissism Inventory was used to measure grandiose and vulnerable narcissism. Simple linear regression analyses tested the association between the subtypes of narcissism and the acceptance of gaslighting, and multiple regression analyses were used to examine gender as a potential moderator. The results showed that both grandiose ( $\beta = .23$ , p = .002) and vulnerable narcissism ( $\beta = .26$ , p < .001) were positively associated with greater acceptance of gaslighting. Gender did not play a moderating role in this relationship for both grandiose ( $\beta = .08$ , p = .602) and vulnerable narcissism ( $\beta = .12$ , p =.539). In conclusion, this study found that both grandiose and vulnerable narcissism were positively associated with greater acceptance of gaslighting. However, the strength of the association between the subtypes of narcissism and the acceptance of gaslighting did not significantly differ between males and females.

# The Association between Grandiose and Vulnerable Narcissism and the Acceptance of Gaslighting in Intimate Relationships

The term gaslighting originates from the 1938 stage play "Gaslight", in which a woman was manipulated by her husband into doubting her sanity. In recent years, the concept of gaslighting has emerged in research about intimate relationships. Themes from the original stage play, such as power, control, and psychological abuse, remain relevant in recent studies and their relation to gaslighting. What remains underexplored is how personality traits, such as narcissism, play a role in gaslighting. Although gaslighting can affect individuals of any gender, prior research primarily focused on female victims and male perpetrators (Stark, 2019). This study further investigates how grandiose and vulnerable narcissism are associated with the acceptance of gaslighting and explores whether gender is a moderating factor in this relationship.

# **Gaslighting and Narcissism in Intimate Relationships**

Gaslighting is a form of psychological manipulation in which the victims are manipulated into doubting their memory, sanity, or perception (Purtseladze, 2024). The goal of gaslighting is to undermine the autonomy of the victims and eliminate their belief in perceptions, decision-making abilities, and security. These effects aim at power and control over the victim (Ciabatti et al., 2024). Long-term psychological effects on victims of gaslighting may include anxiety, depression, psychological trauma, and isolation (Medical News Today, 2020). In the clinical field, gaslighting is recognised as a form of emotional abuse (Stark, 2019). While much research has investigated the consequences of gaslighting, less is known about the psychological mechanisms that influence individuals' attitudes towards gaslighting. This study explores this by using the Gaslighting Questionnaire developed by March et al. (2023), a 10-item scale designed to measure the acceptance of gaslighting. Focussing on the acceptance of gaslighting rather than self-reported perpetration of gaslighting could minimise social desirability bias among participants (March et al., 2023). For example, individuals are less likely to admit engaging in gaslighting behaviour, but are more likely to express an accepting attitude towards scenarios that involve gaslighting.

In understanding the psychological mechanisms behind gaslighting, it is important to consider narcissism, a personality trait frequently associated with manipulative and controlling behaviour. Narcissism is characterised by a strong need for attention, excessive self-love, and a strong sense of entitlement (Oliver et al., 2023). The construct of narcissism is often divided into the subtypes of grandiose and vulnerable narcissism. Grandiose narcissism is characterised by arrogance, high self-esteem, and entitlement. In contrast, vulnerable narcissism is marked by egocentrism, low or fluctuating self-esteem, distrust in others, and social isolation (Miller et al., 2021). Research by Dickinson and Pincus (2003) found that individuals high in grandiose narcissism display arrogant, exploitative, and entitled behaviours towards their relatives. In contrast, individuals high in vulnerable narcissism tend to exhibit self-devaluation, view others negatively, experience feelings of emptiness and rage, and perceive themselves as victims (Dickinson & Pincus, 2003).

Although both subtypes have different characteristics, their association with the acceptance of gaslighting may be expected to be similar, especially in intimate relationships, as both narcissistic subtypes play a significant role in intimate partner violence. Intimate partner violence is the presence of physical or psychological violence in an intimate relationship (March et al., 2023). Grandiose narcissists become violent towards their partners when their self-esteem gets threatened, and vulnerable narcissists exhibit anger episodes due to fear of abandonment (Oliver et al., 2023). Arabi (2022) hypothesised that narcissistic behaviours, such as manipulation, verbal abuse, and excessive attention seeking, could result in gaslighting. As both subtypes of narcissism are associated with some form of intimate

partner violence, this study expected that the subtypes of narcissism would be positively associated with the acceptance of gaslighting.

Next to the subtypes of narcissism, power inequality between males and females in intimate relationships might contribute to the prevalence of gaslighting (Sweet, 2019). Stark (2019) presented a theoretical perspective that gaslighting directed at women who accuse men of harmful behaviour undermines women's confidence in accusations and beliefs through manipulative tactics. This perspective is supported by empirical research from Hailes and Goodman (2023), who found that women in intimate relationships experience self-doubt as a result of gaslighting, which benefits the partners by taking power and domination within the relationship. Furthermore, men displayed, on average, higher levels of narcissism than women, especially towards grandiose traits such as feeling entitled and exploiting others (Grijalva et al., 2014). Moreover, research by March et al. (2023) found that men high in vulnerable narcissism are more likely to accept gaslighting tactics within an intimate relationship. Therefore, this study expected that gender would moderate the relationship between the subtypes of narcissism and the acceptance of gaslighting, with the association predicted to be stronger among men.

The subtypes of narcissism regarding gaslighting have been less thoroughly investigated compared to the general link between narcissism and gaslighting. Research by Arabi (2022) investigated this relationship and did not find significant results correlating the subtypes of narcissism with gaslighting. In contrast, research by March et al. (2023) found significant positive correlations between all dark tetrad traits, including both grandiose and vulnerable narcissism, and the acceptance of gaslighting. Research by Strombach (2024) also found a significant relationship between vulnerable narcissism and the acceptance of gaslighting, but the association between grandiose narcissism and the acceptance of gaslighting was insignificant. The varying results from these studies indicate that the relationship between grandiose and vulnerable narcissism concerning the acceptance of gaslighting remains underexplored.

#### **Current study**

The current study will investigate the relationship between the subtypes of narcissism and the acceptance of gaslighting by answering the research question: "What is the relationship between grandiose and vulnerable narcissism to the acceptance of gaslighting?". The current study will also focus on the follow-up question: "To what extent does gender moderate the relationship between grandiose and vulnerable narcissism and the acceptance of gaslighting?". Based on these questions, the following hypotheses are formulated.

- H1: Higher levels of grandiose narcissism will be associated with a greater acceptance of gaslighting.
- H2: Higher levels of vulnerable narcissism will be associated with a greater acceptance of gaslighting.
- H3: Gender will moderate the relationship between grandiose narcissism and acceptance of gaslighting, such that the effect will be more substantial for men.
- H4: Gender will moderate the relationship between vulnerable narcissism and acceptance of gaslighting, such that the effect will be more substantial for men.

#### Methods

#### **Design and Participants**

The present study used a quantitative, cross-sectional research design. This research project was conducted as part of a Bachelor's thesis and received ethical approval from the Ethics Committee BMS/Domain Humanities & Social Sciences (250463).

The present study employed non-probability convenience sampling to recruit participants through the University of Twente SONA research credits system. The study was also shared through personal networks and promoted via Instagram stories and WhatsApp group chats, resulting in a higher and more diverse response rate. The survey received 218 responses, resulting in a final sample of 169 participants who completed the full survey. An a priori power analysis was performed, which showed that a sample size of at least 76 participants was required to detect a medium effect ( $f^2 = 0.15$ ) with three predictors, an alpha level of .05, and a desired power of .80 in a multiple linear regression analysis. The final sample exceeded the required sample size determined by the power analysis. This ensured sufficient power to detect expected effects.

## Materials

The study was conducted using an online survey created and distributed through the online platform Qualtrics (https://www.qualtrics.com). The survey included several previously developed questionnaires that were standardised and validated.

## Questionnaires for the Current Study

The Gaslighting Questionnaire (March et al., 2023) is a 10-item self-report instrument that measures participants' attitudes towards specific gaslighting tactics. Items were rated on a 7-point Likert scale, ranging from 1 (Unacceptable) to 7 (Acceptable). An example item includes: "Person A never admits to doing anything wrong, even when Person B has proof that Person A did do something wrong". In the study of March et al. (2023), the scale has demonstrated excellent internal consistency ( $\alpha$  = .97). The Gaslighting Questionnaire also showed good internal consistency in the current study ( $\alpha$  = .85). Participants could score a minimum sum score of 10 and a maximum of 70 with higher scores indicating greater acceptance of gaslighting tactics in intimate relationships.

The Super-Brief Pathological Narcissism Inventory (SB-PNI) (Pincus et al., 2009) is a 12-item shortened version of the Pathological Narcissism Inventory designed to measure both grandiose and vulnerable narcissism. The first six items of the SB-PNI measured grandiose narcissism, and the last six items measured vulnerable narcissism. The SB-PNI used a 6-point Likert scale (1 = "Not at all like me", 6 = "Very much like me"). One example item of grandiose narcissism included "It's hard to feel good about myself unless I know other people admire me". An example of a vulnerable narcissism item involved "It's hard for me to feel good about myself unless I know other people like me". The Cronbach's alpha for the items of the SB-PNI received good internal consistency for both the grandiose narcissism items ( $\alpha$  = .80) and the vulnerable narcissism items ( $\alpha$  = .89) (Kapetanovic et al., 2024). In the current study, the SB-PNI demonstrated acceptable internal consistency, with Cronbach's alpha values of .75 for the grandiose narcissism items and .78 for the vulnerable narcissism items. Each subscale of narcissism, grandiose and vulnerable, had a minimum score of 6 and a maximum score of 36. Higher scores on either subscale indicated higher levels of that narcissistic subtype.

Other questionnaires were also implemented in the Qualtrics study that were used by collaborating researchers. These questionnaires included the Adverse Childhood Experiences Questionnaire (Felitti et al., 1998), the Big Five Inventory–2 Extra-Short Form (Soto & John, 2017), the Revised Adult Attachment Scale (Collins, 1996), and the Borderline Symptom List – 23 (Bohus et al., 2009).

# Procedure

Data was collected from March 31<sup>st</sup> to April 25<sup>th</sup>. The questionnaire started with an introduction, where participants were informed that they could withdraw at any point, that data would be archived and anonymised, and that the survey included sensitive topics. The participants were provided with contact information for the Secretary of the Ethics Committee and the researcher for any questions about their rights as participants, concerns about the study, or to obtain more information about this study. Participants were asked for their consent to participate in the study by confirming that they understood the study information, that they voluntarily took part in the study, understood its purpose, and that their responses would be

kept in a secure environment. After obtaining active online consent, participants were asked to provide information about their demographics, including gender, age, nationality, and educational level. Following up, all participants started with the Gaslighting Questionnaire (March et al., 2023). The other questionnaires were randomly presented to each participant. Throughout these questionnaires, all participants received one attention check: "Are you paying attention to this study?". The participant should have answered "Yes" to keep the response sufficient. After answering the questions, participants were directed to a debrief page that provided information about the survey's purpose and offered additional contact details for mental healthcare. The participants were asked if they were still comfortable sharing the data for this research. When participants answered "No", their responses were automatically deleted. Participants spent a median of 834.5 seconds, approximately 13 minutes and 55 seconds, completing the questionnaire.

## **Data Analysis**

All analyses were conducted using R (R Core Team, 2022). The R script containing all the code used for the data analysis is available at the following link: <u>https://osf.io/wm487/</u>. First, the data was screened. Participants who failed the attention check were excluded from the dataset (n = 38). Participants who had incomplete responses to key variables (Gaslighting Questionnaire or SB-PNI) were also excluded (n = 8). As this study focused on gender differences between male and female participants, third gender participants were lastly deleted (n = 3). Secondly, the data was prepared by computing the summed scores for the acceptance of gaslighting, grandiose narcissism, and vulnerable narcissism. For every model used in this study, both standardised and unstandardised effects were reported. The magnitude of the standardised effects was interpreted based on research by Cohen (2013).

Simple linear regression models were used to test hypotheses 1 and 2. The first model tested the association between grandiose narcissism and the acceptance of gaslighting. The

second model tested the association between vulnerable narcissism and the acceptance of gaslighting. Hypotheses 1 and 2 were accepted if the slope was positive and had a significant result (p < .05).

Hypotheses 3 and 4 were tested by conducting two separate multiple regression analyses. The multiple regression analyses tested whether gender played a moderating role in the association between the subtypes of narcissism and the acceptance of gaslighting (Baron & Kenny, 1986). Each multiple regression analysis included a subtype of narcissism and gender as the independent variables, with the acceptance of gaslighting as the dependent variable. The first multiple regression model tested the interaction of grandiose narcissism and gender on the acceptance of gaslighting, and the second model tested the interaction of vulnerable narcissism and gender on the acceptance of gaslighting. Gender was coded in both models as a binary variable (0 = male, 1 = female). Hypotheses 3 and 4 were accepted if the interaction effect of the subtype of narcissism and gender on the acceptance of gaslighting was significant (p < .05). Simple slope plots were created to show the difference between the participants who scored lower or higher on the subtypes of narcissism and how this affected the acceptance of the gaslighting score. The median was calculated in order to differentiate between lower and higher scores.

Before conducting the regression analyses, the assumptions of linearity, independence of residuals, homoscedasticity, and normality were tested to ensure the validity of the regression analyses. The linearity assumption was tested using scatterplots of residuals, and it was met when the residuals scattered randomly around the zero line. The independence was tested using the Durbin-Watson test (Durbin & Watson, 1951), and it was met when the values were between 1.5 and 2.5. The homoscedasticity was tested using the Breusch-Pagan test (Breusch & Pagan, 1979), and it was met when the *p*-value was non-significant (p > .05). Normality was tested using the Shapiro-Wilk test (Shapiro & Wilk, 1965), and it was met when the *p*-value was non-significant (p > .05).

#### Results

# **Descriptives**

A total of 218 people participated in the survey. The final sample consisted of 169 participants (71% female, 29% male). The age ranged from 18 to 78 (M = 26.59, SD = 11.97). The majority of participants were German (n = 100), followed by Dutch participants (n = 34), and other nationalities (n = 35). When asked about their highest completed or current level of education, 1 participant reported primary school, 90 reported high school, 60 reported a bachelor's degree, and 17 reported a master's degree. The median of the Gaslighting Questionnaire was 15 (IQR = 12 to 21). The median for grandiose narcissism items was 18 (IQR = 13 to 22), and for the vulnerable narcissism items was 14 (IQR = 10 to 20).

# Assumptions

The linearity and independence of residuals assumption were both met for the analyses between grandiose and vulnerable narcissism on the acceptance of gaslighting. The homoscedasticity assumption was violated for the vulnerable narcissism model on the acceptance of gaslighting (BP = 12.69, p < .05). Therefore, robust standard errors were used for the simple regression analysis and the moderation analysis that included vulnerable narcissism. The normality assumption was also violated in both models, but the regression analyses proceeded due to the large sample size of 169 participants.

#### **Regression analyses**

For hypotheses 1 and 2, simple regression analyses were performed. Based on the results (Table 1), both grandiose and vulnerable narcissism were significantly positively associated with the acceptance of gaslighting. The magnitude of these effects was for both analyses small to moderate (Cohen, 2013).

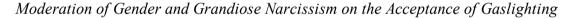
# Table 1

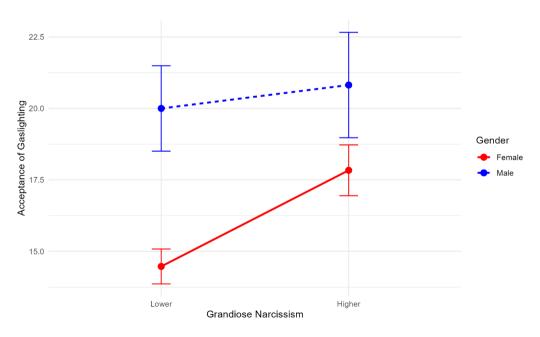
Summary of Simple Linear Regression Analyses on the Acceptance of Gaslighting (n = 169)

Variable	B (SE)	β (95% CI )	t	р
Grandiose Narcissism	.16 (0.05)	.23 (0.08, 0.38)	3.09	.002
Vulnerable Narcissism	.17 (0.05)	.26 (0.11, 0.41)	3.43	< .001

The multiple regression analyses were performed to test hypotheses 3 and 4. Figure 1 illustrates the moderation of gender on the relationship between grandiose narcissism and the acceptance of gaslighting. Both males and females showed higher acceptance of gaslighting when grandiose narcissism was at a higher level. Although this effect appeared to be stronger for females, the interaction effect was statistically insignificant (p = .602).

# Figure 1



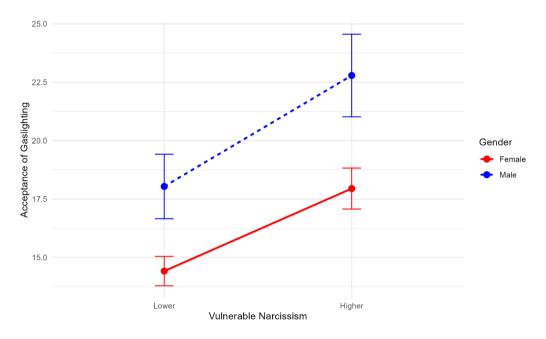


*Note.* Error bars represent  $\pm 1$  standard error of the mean.

Figure 2 illustrates the moderation of gender in the relationship between vulnerable narcissism and the acceptance of gaslighting. Again, both males and females showed higher acceptance of gaslighting when vulnerable narcissism was higher, and the interaction effect was statistically insignificant (p = .539).

# Figure 2

Moderation of Gender and Vulnerable Narcissism on the Acceptance of Gaslighting



*Note.* Error bars represent  $\pm 1$  standard error of the mean.

The figures illustrated similar slopes for both male and female participants, which showed a higher acceptance of gaslighting score when scoring higher on the narcissistic subtypes. The multiple regression analyses showed that the interaction effect of gender on the relationship between both grandiose and vulnerable narcissism and the acceptance of gaslighting was statistically insignificant (Table 2). The magnitude of the interaction effect was weak for both analyses (Cohen, 2013).

## Table 2

Summary of Multiple Regression Analyses on the Acceptance of Gaslighting (n = 169)

Variable	<b>B</b> (SE)	β (95% CI)	t	р
Model 1: Grandiose Narcissism				
Grandiose Narcissism	.06 (.18)	.08 (-0.45, 0.61)	0.31	.755
Gender	57 (.34)	58 (-0.89, -0.26)	-3.58	<.001
Grandiose Narcissism X Gender	.05 (.10)	.08 (-0.22, 0.39)	0.52	.602
Model 2: Vulnerable Narcissism				
Vulnerable Narcissism	.04 (.23)	.06 (-0.46, 0.58)	0.17	.868
Gender	61 (.31)	58 (-0.89, -0.27)	-3.18	.002
Vulnerable Narcissism X Gender	.08 (.13)	.12 (-0.19, 0.42)	0.62	.539

## Discussion

#### **Main Findings**

The purpose of this study was to investigate the association between grandiose and vulnerable narcissism and the acceptance of gaslighting. This study expected that both grandiose and vulnerable narcissism would be associated with a greater acceptance of gaslighting. This study also investigated gender as a potential moderator between the association of the subtypes of narcissism and the acceptance of gaslighting, and expected that the moderation would be more substantial for men. The results supported the hypotheses that grandiose and vulnerable narcissism are positively associated with greater acceptance of gaslighting. The strengths of these associations were small to moderate. The hypotheses about the moderating role of gender were rejected, as this study did not find any significant associations for gender interacting between the subtypes of narcissism and the acceptance of gaslighting.

First of all, the finding that vulnerable narcissism is positively associated with greater acceptance of gaslighting corroborates previous work by March et al. (2023) and Strombach (2024). March et al. (2023) found a positive association by testing vulnerable narcissism as a moderator between gender and the acceptance of gaslighting. Their results found that both males and females showed higher acceptance of gaslighting when scoring higher on vulnerable narcissism, and that this correlation was stronger for men than women. In contrast, the present study only found a positive association through the direct relationship between vulnerable narcissism and the acceptance of gaslighting, but did not examine whether this relationship was more substantial for men than women. Research by Strombach (2024) found a significant association between generalised narcissism, which is the total score of both vulnerable and grandiose narcissism, and the acceptance of gaslighting. Strombach (2024) showed that this significant association was due to vulnerable narcissism and not grandiose narcissism. By testing the subtypes of narcissism separately from each other to the acceptance of gaslighting, vulnerable narcissism had a stronger significant association with the acceptance of gaslighting, compared to grandiose narcissism, which was not significantly associated. Therefore, the findings of this present study extended previous research that also found significant associations between vulnerable narcissism and the acceptance of gaslighting.

Secondly, the present study's finding that grandiose narcissism is positively associated with greater acceptance of gaslighting has not been found in previous research by Arabi (2022) and Strombach (2024). Strombach (2024) used similar measurement instruments, including the Gaslighting Questionnaire and the Brief Pathological Narcissism Inventory. Strombach's results possibly differ from those of the present study because Strombach (2024) did not employ a simple linear regression model to examine the relationship between grandiose narcissism and the acceptance of gaslighting. Instead, grandiose narcissism was included in the moderation analyses but not as an independent variable in a univariable model, which could have affected the insignificant association between grandiose narcissism and the acceptance of gaslighting. In the case of Arabi (2022), this discrepancy can be explained by the materials used to measure gaslighting. The only question their research included for measuring gaslighting was "Have you encountered attempts by this partner to deny your perception of reality, thoughts or feelings?". This question measured a different construct as it focused more on direct gaslighting behaviour instead of the acceptance of gaslighting. Therefore, the results of the present study may differ from Arabi (2022) due to the use of the Gaslighting Questionnaire, which measured the acceptance of gaslighting instead of actual gaslighting experiences. Another possible explanation for the discrepancy could be that the participants in the study of Arabi (2022) were recruited when they identified as having been in a relationship with someone with narcissistic traits. The present study used a more general population sample, which may have influenced how narcissism and gaslighting were perceived and measured.

While significant associations were found between both grandiose and vulnerable narcissism and the acceptance of gaslighting, the moderation effect of gender was not significant. Therefore, this study failed to show whether the association of both grandiose and vulnerable narcissism with the acceptance of gaslighting was more substantial for males than for females. One possible explanation for this could be relatively low scores on the gaslighting and narcissism scales. This may have impacted the chance to detect significant associations of the interaction effect of gender on the relationship between grandiose and vulnerable narcissism and the acceptance of gaslighting. Interaction effects typically require more statistical power, and the low scores of the participants could have made it even harder to observe a significant moderation. Research by March et al. (2023) did show a significant moderating effect for gender between vulnerable narcissism and the acceptance of gaslighting. in which the effect was more substantial for men than women. Similar methods were used in this present study, however, the discrepancy in results could be attributed to the fact that the sample by March et al. (2023) was both larger and scored higher on the narcissism and gaslighting scales, resulting in greater statistical power to detect a significant association compared to this present study.

### **Limitations and Strengths**

A particular limitation of the current study was that it asked participants about their acceptance of gaslighting, rather than actual gaslighting perpetration or experiences. This choice was made because the study aimed to utilise the existing and validated Gaslighting Questionnaire by March et al. (2023), which measures the acceptance of gaslighting to prevent the social desirability bias in the participants' responses. This choice limited this study in finding associations between narcissism and actual gaslighting perpetration. The use of the SB-PNI, a self-report measurement tool for measuring grandiose and vulnerable narcissism traits, may have contributed to social desirability bias. Participants may have overestimated their positive traits and underreported socially undesirable behaviours. This could have impacted the low median score on both the narcissistic subtypes. Another limitation is the violation of the normality assumptions in both models and the homoscedasticity assumption for the vulnerable narcissism model on the acceptance of gaslighting. Although the use of robust standard errors and a sufficiently large sample size reduced concerns about these assumptions, the violations suggest that the linear model may not fit all participants equally well. Therefore, the generalisability of the findings to a broader population may be limited.

One strength of this study was the use of validated instruments for collecting the data. Both the Gaslighting Questionnaire and the SB-PNI showed good internal consistency in prior research and the present study. This helped obtain reliable information on the variables necessary for explaining the association between the narcissistic subtypes and the acceptance of gaslighting. Furthermore, the final sample size of 169 participants was a strength of this study, as it exceeded the required sample size of 76 determined by the power analysis for detecting medium-sized effects. However, it is worth noting that a larger sample may still be required to detect minor effects and associations for the moderation analyses. Lastly, this study provided insight into the underexplored relationship between narcissistic traits and the acceptance of gaslighting. The contribution of the significant associations between grandiose and vulnerable narcissism and the acceptance of gaslighting adds to the evidence base within this area of research.

#### **Future research**

Future research could focus on developing more nuanced methods for investigating actual gaslighting perpetration, especially methods that account for social desirability bias. Since directly admitting to gaslighting behaviour can be too sensitive and or stigmatised, using qualitative interviews or scenario-based assessments could allow a more profound understanding of how people experience gaslighting in their own words (Burney et al., 2023). Furthermore, experience sampling methods or daily diary studies could be implemented to investigate gaslighting behaviour in everyday life (Conner et al., 2009). By using these methods, researchers could better understand the dynamic nature of gaslighting and why and when people engage in such behaviour. Research could then explore how narcissism is associated with actual gaslighting perpetration, not just the acceptance.

Another recommendation for future research is to explore the underlying mechanisms that link the different subtypes of narcissism to the acceptance of gaslighting. Although grandiose and vulnerable narcissism differ from each other, both were similarly positively associated with the acceptance of gaslighting in the present study. Future research could investigate which psychological mechanisms for each subtype of narcissism explain the similar associations found in the present study. Mediation analyses (Baron & Kenny, 1986) could be employed in future research to investigate this further. Based on previous research, variables such as inflated self-esteem, strong sense of self-entitlement, and arrogance might play a mediating role between grandiose narcissism and the acceptance of gaslighting (Miller et al., 2021). For the link between vulnerable narcissism and the acceptance of gaslighting, variables that could play a mediating role could be distrust in others, fear of abandonment, and perceiving oneself as a victim (Dickinson & Pincus, 2003; Miller et al., 2021; Oliver et al., 2023). Exploring different mechanisms as mediators for the relationship between grandiose and vulnerable narcissism on the acceptance of gaslighting could further identify why people who exhibit narcissistic traits behave with an accepting attitude towards gaslighting tactics.

## Conclusion

In conclusion, this study investigated the relationship between grandiose and vulnerable narcissism and the acceptance of gaslighting. This study found that both grandiose and vulnerable narcissism were positively associated with greater acceptance of gaslighting. These results expanded the literature by identifying grandiose narcissism as a relevant variable that associates with the acceptance of gaslighting, which has not been found in prior research. Gender was not found to moderate the relationship between grandiose and vulnerable narcissism and the acceptance of gaslighting. This study suggests that future research should develop qualitative interviews, scenario-based assessments, and experience sampling methods, such as daily diaries, to measure actual gaslighting perpetration that accounts for social desirability bias. This study also recommended future research to investigate potential mediators for the associations found in the present study. This could expand research on the relationship between narcissism and actual gaslighting perpetration, and which underlying mechanisms may lead to an accepting attitude towards gaslighting tactics.

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