



The targets of all treachery: Delusional ideation, paranoia, and the need for uniqueness as mediators between two forms of narcissism and conspiracy beliefs

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ABSTRACT

The present cross-sectional study ($N_{\text{Participants}} = 397$; $N_{\text{Informants}} = 460$) examined the association of both grandiose narcissism and vulnerable narcissism with conspiracy beliefs in the context of four theoretically-relevant mediators. Participants who were higher in grandiose narcissism and vulnerable narcissism were more likely to believe in conspiracy theories, seemingly because they were more likely to hold unusual beliefs. There was, likewise, some evidence to suggest that those high in vulnerable narcissism believe in conspiracy theories because they suffer from paranoia, whereas those high in grandiose narcissism believe in conspiracy theories because of a desire to be unique. Together, these results suggest that the conspiracist ideation seen among those high in grandiose narcissism and vulnerable narcissism is a consequence of features that are shared between and unique to each of the traits.

1. Introduction

Although there continues to be considerable discussion surrounding the exact definition of a conspiracy theory (e.g., Brotherton, 2015; Sunstein & Vermeule, 2009), many researchers return to some form of the original definition proposed by Hofstadter (1996). Hofstadter wrote that a conspiracy theory—or what he referred to at the time as the “central preconception of the paranoid style”—is a belief in “the existence of a vast, insidious, preternaturally effective international conspiratorial network designed to perpetrate acts of the most fiendish character” (p. 12). Take the recently reignited belief that the earth is flat as an example. To our knowledge, the earth is round (or, to be more accurate, an oblate spheroid). A seemingly increasing number of people have, however, come to the conclusion that the earth is, in reality, flat (see Olshansky, Peaslee, & Landrum, 2020). In their view, the notion that the earth is round is nothing less than a global propaganda campaign intended to further a set of undeniably nefarious (yet undeniably nebulous) goals.

Owing to recent research, the consequences of these beliefs are not nebulous, but, unfortunately, they are more serious than one might initially assume. Among other things, believing in conspiracy theories has been linked to prejudicial beliefs (Bilewicz, Winiewski, Kofta, & Wójcik, 2013; Jolley, Meleady, & Douglas, 2020; Swami, 2012),

political apathy (Butler, Koopman, & Zimbardo, 1995; Jolley & Douglas, 2014b), and—especially relevant to the COVID-19 pandemic—a distrust of vaccines (Craciun & Baban, 2012; Jolley & Douglas, 2014a; Lewandowsky, Gignac, & Oberauer, 2013; Bertin et al., 2020).

Given the seriousness of these beliefs, it comes as little surprise that researchers have devoted substantial effort to identifying what it is about certain people that lead them to believe in conspiracy theories. For instance, a number of studies have examined the role of general personality traits (e.g., openness) in these beliefs (see Goreis & Voracek, 2019). Less attention, however, has been directed towards the more disagreeable aspects of personality. The present study takes up this particular mantle by investigating the association of two dimensions of narcissism with conspiracist ideation in the context of four theoretically-relevant mediators.

Although other variants exist (e.g., collective narcissism, Golec de Zavala, Cichocka, Eidelson, & Jayawickreme, 2009), researchers and clinicians have largely coalesced around the idea that there are two distinct dimensions of narcissism (Cain, Pincus, & Ansell, 2008; Dickinson & Pincus, 2003; Gabbard, 1989; Miller et al., 2011; Pincus & Roche, 2012; Wink, 1991). The first dimension—what is called *grandiose narcissism*—is what probably comes to mind when a person hears the word narcissism. It is characterized, in part, by excessive self-confidence, a sense of one’s superiority over others, and fantasies of

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grandeur. The second dimension—what is called *vulnerable* narcissism—is similar to grandiose narcissism insofar that it is characterized by arrogance, entitlement, and callousness, but it also includes high levels of self-consciousness, insecurity, and shame. In other words, grandiose narcissism and vulnerable narcissism both involve an inordinate focus on the self, but, in the case of grandiose narcissism, that focus is primarily complimentary while, in the case of vulnerable narcissism, that focus is primarily derogatory.

Most of the prior research on the association between narcissism and conspiracist ideation has focused on this grandiose variant. Researchers have, for example, demonstrated that grandiose narcissism is associated with both general conspiracy theories (Cichočka, Marchlewska, & Golec de Zavala, 2016; Kay, 2021) and conspiracy theories about COVID-19 specifically (Kay, 2020; Malesza, 2020). To our knowledge, only two studies (i.e., Jolley & Paterson, 2020; March & Springer, 2019) have investigated the association between vulnerable narcissism and conspiracist ideation, and the researchers found that—at least when considered at the zero-order level—vulnerable narcissism was associated with believing in conspiracy theories. Despite the many strengths of these two studies, they both used only a single measure of vulnerable narcissism and only made use of self-report data. This raises the possibility that any relations identified were a consequence of the specific measures used or the specific method used. As such, the first goal of the present study was to provide a high-powered, multimeasure, and multimethod examination of the association of both grandiose narcissism and vulnerable narcissism with conspiracist ideation.

The second goal of the present study was to extend the existing literature by investigating psychological features that may be able to help account for the association between these two forms of narcissism and conspiracist ideation. One might assume that—since both forms of narcissism share a common core (e.g., low agreeableness, Miller, Lynam, Hyatt, & Campbell, 2017; Miller et al., 2016)—grandiose narcissism and vulnerable narcissism would be associated with conspiracist ideation for primarily the same reason (or the same set of reasons). Grandiose narcissism and vulnerable narcissism have, however, been shown to have distinct nomological networks (e.g., Miller et al., 2011). It is, therefore, possible that the two forms of narcissism would be linked to conspiracist ideation for different reasons as well.

In terms of a mediator that might be shared by both forms of narcissism, one possible candidate is delusional ideation (i.e., a predisposition towards odd and unusual beliefs). Potentially as a prerequisite of the grandiose fantasies entertained by grandiose narcissists and the delusions of persecution suffered by vulnerable narcissists, both forms of narcissism do appear to be linked to psychoticism and the tendency to hold odd and unusual beliefs (Gentile et al., 2013; Miller, Gentile, Wilson, & Campbell, 2013; Miller et al., 2018; Thomas, Wright, Lukowitsky, Donnellan, & Hopwood, 2012; Wright et al., 2013; but see also Grigoras & Wille, 2017). The tendency to have these beliefs has, in turn, been linked to conspiracist ideation (Barron, Furnham, Weis, Morgan, Towell, & Swami, 2018; Brotherton, French, & Pickering, 2013; Bruder, Haffke, Neave, Nouripana, & Imhoff, 2013; Larsen, Donaldson, & Mohanty, 2020; Swami, Weis, Lay, Barron, & Furnham, 2016). It seems plausible that people scoring high on grandiose *and* vulnerable narcissism could believe unusual things about, for example, the government because they are more likely to believe in unusual things more generally. Kay (2021) has, in fact, shown that delusional thinking accounts for the association between grandiose narcissism and conspiracist ideation. Likewise, March and Springer (2019) demonstrated that the association of both grandiose narcissism and vulnerable narcissism with conspiracist ideation disappears when controlling for the presence of odd beliefs, potentially because partialling out delusional ideation removes the portion of both forms of narcissism that is relevant to conspiracist

ideation.

It is, nevertheless, also possible that vulnerable narcissism is linked to conspiracist ideation through a specific type of unusual belief—one that is not shared, or not shared to the same degree, with grandiose narcissism. Specifically, those scoring high in vulnerable narcissism may be prone to believe in conspiracy theories because they are more likely to suffer from paranoia (i.e., a pervasive distrust and suspiciousness of others). Vulnerable narcissism has been linked to elevated levels of paranoia, distrust, and suspiciousness (Miller et al., 2018; Thomas et al., 2012; Wright et al., 2013), and these associations are consistently greater than those seen for grandiose narcissism (Miller et al., 2010, 2011; Miller et al., 2013). Paranoia has, in turn, been shown to be highly associated with conspiracist ideation (Imhoff & Lamberty, 2018). People who are high in vulnerable narcissism may, as a result, be more willing to endorse conspiracy theories because they, not only hold odd beliefs about the government and other elite institutions, but also because they are skeptical of the government and other elite institutions.

Additional research has suggested that paranoia may also play a role in the relationship between grandiose narcissism and the tendency to believe in conspiracy theories. Namely, Cichočka et al. (2016) demonstrated that paranoia fully mediates the relationship between grandiose narcissism and conspiracist ideation. It is important to note, however, that the researchers did not account for delusional ideation in their model. As such, it is possible that paranoia mediated the association between grandiose narcissism and conspiracist ideation because paranoia reflects, in part, the tendency to hold odd and unusual beliefs.

Turning to mediators that may be more directly relevant to grandiose narcissism, there is reasonable evidence to suggest that the link between grandiose narcissism and conspiracist ideation is explained by a desire to feel unique. That is, those high in grandiose narcissism may be drawn to conspiracy theories because it reinforces their grandiose sense of self by allowing them to believe they are in possession of knowledge that others are not privy to or that others are too simple-minded to realize for themselves. As Brotherton (2015) wrote, a conspiracy theory can act as “an invitation to join an enlightened but embattled minority—an elect few who bravely, selflessly speak truth to power” (p. 150). In line with this notion, grandiose narcissism has been theoretically and empirically linked to wanting to be unique (Back et al., 2013; de Bellis, Sprott, Herrmann, Bierhoff, and Rohmann, 2016; Emmons, 1984; Lee, Gregg, & Park, 2013; Lee & Seidle, 2012; Ohmann & Burgmer, 2016), and wanting to be unique has been linked to believing in conspiracy theories (Lantian, Muller, Nurra, & Douglas, 2017). Nonetheless, it is important to note that Kay (2021) found relatively limited evidence that a desire for uniqueness mediates the association between grandiose narcissism and conspiracist ideation, owing to a small association between uniqueness and conspiracist ideation (i.e., $\beta = 0.02$).

In addition to wanting to feel unique, a desire for control may also explain some of the relationship between grandiose narcissism and conspiracist ideation. According to Douglas, Sutton, and Cichočka (2017), one of the reasons people are drawn to conspiracy theories is because they see it as a way to reassert control over their lives. Thus, if those scoring high in grandiose narcissism feel a greater need for control—as is suggested by (a) the central position of authority in many conceptualizations of grandiose narcissism (e.g., Glover, Miller, Lynam, Crego, & Widiger, 2012; Raskin & Terry, 1988) and (b) the consistent associations between grandiose narcissism and assertiveness (Miller et al., 2010; Miller et al., 2011)—they may gravitate towards conspiracy theories as a way to satisfy that desire. Indeed, Kay (2021) has found some evidence that a desire for control mediates the association between the more leadership-oriented aspects of grandiose narcissism and conspiracist ideation.

2. The current study

The present study used both self-report and informant-report measures to examine the association of grandiose narcissism and vulnerable narcissism with conspiracist ideation. Four potential mediators of these two relationships were considered: (1) Delusional ideation, (2) paranoia, (3) the desire to be unique, and (4) the desire for control. It was expected that delusional ideation would mediate both the association between grandiose narcissism and conspiracist ideation and the association between vulnerable narcissism and conspiracist ideation¹. Moreover, it was expected that paranoia would explain some of the association between vulnerable narcissism and conspiracist ideation, whereas the desire to be unique and the desire for control would explain some of the association between grandiose narcissism and conspiracist ideation.

In addition to furthering our understanding of the nomological networks of grandiose narcissism and vulnerable narcissism, the present research may also prove useful when it comes to addressing conspiracist ideation among those high in grandiose narcissism and vulnerable narcissism. If grandiose narcissism and vulnerable narcissism are linked to conspiracist ideation for different reasons, it would suggest that different interventions will be needed to combat these beliefs among those high in grandiose narcissism and among those high in vulnerable narcissism.

3. Method

3.1. Participants, informants, and procedures

Five hundred undergraduate students were awarded course credit for completing a one-hour online survey that included the self-report measures described below. Participants who showed evidence of straightlining (i.e., those who provided the same response to every question for a given survey block; $n = 25$), speeding (i.e., those with response durations less than one-third of the median response time; $n = 19$), or inattentive responding (i.e., those who responded in an unusual way to the attention check items included in each block²; $n = 59$) were excluded from analyses. In the end, the sample comprised 397 participants (M age = 19.49; SD age = 2.45; 72.80% women; 25.44% men). A sample of this size had a 98.07% chance of detecting a moderate effect ($r = 0.20$, Funder & Ozer, 2019; Gignac & Szodorai, 2016) when such an effect existed.

Before being debriefed, participants were asked to nominate three people who they believed knew them well enough to provide an accurate account of their personalities³. The three nominees were automatically emailed a survey containing the informant-report measures described below. Informants who straightlined ($n = 1$) or sped through ($n = 9$) the survey were excluded from analyses, as were those who completed a rating for a participant who was, themselves, excluded ($n = 37$). In the end, the sample included 460 informants for an average of 1.07 informants per participant ($SD = 1.08$). Informants had known the participants for an average of 11.70 years ($SD = 7.94$), and the majority

of informants were either the participants' relatives (50.12%), friends (41.13%), or romantic partners (6.86%). In the event that more than one informant evaluated a single participant, the scores were averaged to provide a single value. As a result, there were informant ratings for 234 participants. A power analysis indicated that a sample of this size had an 87.02% chance of detecting a moderate effect ($r = 0.20$, Funder & Ozer, 2019; Gignac & Szodorai, 2016) when such an effect existed.

3.2. Materials

Unless otherwise noted, participants and informants responded to all scales using a 5-pt Likert scale (1 = "strongly disagree"; 5 = "strongly agree").

3.2.1. Self-report measures

3.2.1.1. Grandiose narcissism. Grandiose narcissism was assessed using (a) the 40-item *Narcissistic Personality Inventory* (NPI) (Raskin & Hall, 1979) (e.g., "I think I am a special person"; $\alpha = 0.92$, $\bar{r}_{ij} = 0.22$); (b) the 9-item narcissism subscale of the *Short Dark Triad* (SD3) (Jones & Paulhus, 2014) (e.g., "People see me as a natural leader"; $\alpha = 0.70$, $\bar{r}_{ij} = 0.21$); and (c) the 5-item exploitativeness (e.g., "I find it easy to manipulate people"; $\alpha = 0.76$, $\bar{r}_{ij} = 0.38$), 5-item self-sacrificing self-enhancement (e.g., "Sacrificing for others makes me the better person"; $\alpha = 0.69$, $\bar{r}_{ij} = 0.26$), and 7-item grandiose fantasies (e.g., "I often fantasize about performing heroic deeds"; $\alpha = 0.87$, $\bar{r}_{ij} = 0.50$) subscales of the *Pathological Narcissism Inventory* (PNI) (Pincus et al., 2009; Wright, Lukowitsky, Pincus, & Conroy, 2010).

3.2.1.2. Vulnerable narcissism. Vulnerable narcissism was assessed using (a) the 10-item *Hypersensitive Narcissism Scale* (HSNS) (Hendin & Cheek, 1997) (e.g., "I often interpret the remarks of others in a personal way"; $\alpha = 0.64$, $\bar{r}_{ij} = 0.15$) and (b) the 12-item contingent self-esteem (e.g., "It's hard for me to feel good about myself unless I know other people like me"; $\alpha = 0.90$, $\bar{r}_{ij} = 0.42$), 6-item hiding the self (e.g., "When others get a glimpse of my needs, I feel anxious and ashamed"; $\alpha = 0.77$, $\bar{r}_{ij} = 0.31$), 7-item devaluing (e.g., "When others don't meet my expectations, I often feel ashamed about what I wanted"; $\alpha = 0.82$, $\bar{r}_{ij} = 0.39$), and 8-item entitlement rage (e.g., "I get mad when people don't notice all that I do for them"; $\alpha = 0.80$, $\bar{r}_{ij} = 0.33$) subscales of the PNI (Pincus et al., 2009; Wright et al., 2010).

3.2.1.3. Conspiracist ideation. Conspiracist ideation was measured using (a) the 15-item *Belief in Conspiracy Theories Inventory* (BCTI) (Swami et al., 2011) (e.g., "The Apollo moon landings never happened and were staged in a Hollywood film studio"; $\alpha = 0.92$, $\bar{r}_{ij} = 0.43$); (b) the 15-item *Generic Conspiracist Beliefs Scale* (GCB) (Brotherton et al., 2013) (e.g., "The government is involved in the murder of innocent citizens and/or well-known public figures, and keeps this a secret"; $\alpha = 0.93$, $\bar{r}_{ij} = 0.46$); (c) the *COVID-19 Conspiracist Ideation Scale* (CCIS) (Kay, 2020) (e.g., "Prominent scientists are suppressing the truth about COVID-19"; $\alpha = 0.80$, $\bar{r}_{ij} = 0.45$); and (d) the 5-item *Conspiracy Mentality Questionnaire* (CMQ) (Bruder et al., 2013) (e.g., "Many very important things happen in the world, which the public is never informed about"; $\alpha = 0.76$, $\bar{r}_{ij} = 0.39$). Participants responded to the BCTI using a nine-point scale (1 = "completely false"; 9 = "completely true").

3.2.1.4. Mediators. Delusional ideation was assessed using the 21-item *Peters Delusions Inventory* (Peters, Joseph, Day, & Garety, 2004) (e.g., "I sometimes feel as if things in magazines or on TV were written especially for me"; $\alpha = 0.82$, $\bar{r}_{ij} = 0.18$). Paranoia was assessed using the 20-item *Paranoia Scale* (Fenigstein & Vanable, 1992) (e.g., "I sometimes feel as if I'm being followed"; $\alpha = 0.85$, $\bar{r}_{ij} = 0.22$). The need for uniqueness was assessed using the 32-item *Uniqueness Scale* (Snyder & Fromkin, 1977)

¹ These hypotheses were not preregistered.

² The attention check items were drawn from the novel 14-item *Inattentive and Deviant Responding Inventory for Statements* (IDRIS). Two of the IDRIS items were administered in the first block of the survey, and four were administered in each of the second, third, and fourth blocks of the survey. Participants were excluded for inattentive responding if they provided an average response of 0 (i.e., "neither agree nor disagree") or greater to the IDRIS items within a given block. The IDRIS is included in the [Supplementary Material](#).

³ In order to tell the informants who they would be rating, it was necessary to collect the participants' first names and the first initial of their last names. As such, raw data for this study will not be made available to other researchers. Anonymized data is available upon request from the corresponding author.

(e.g., “I tend to express my opinions publicly, regardless of what others say”; $\alpha = 0.79$, $\bar{r}_{ij} = 0.11$). The desire for control was assessed using the 20-item *Desirability of Control Scale* (Burger & Cooper, 1979) (e.g., “I enjoy making my own decisions”; $\alpha = 0.68$, $\bar{r}_{ij} = 0.10$).

3.2.2. Informant-report measures

Informants evaluated the participants using three measures. First, they evaluated the participants’ levels of grandiose narcissism using a novel third-person adaptation of the 16-item NPI (Ames, Rose, & Anderson, 2006) (e.g., “They think people should always recognize their authority”; $\alpha = 0.89$, $\bar{r}_{ij} = 0.33$). Second, they evaluated the participants’ levels of vulnerable narcissism using a novel third-person adaptation of the HSNS (Hendin & Cheek, 1997) (e.g., “They dislike sharing the credit of an achievement with others”; $\alpha = 0.77$, $\bar{r}_{ij} = 0.26$). Third, they evaluated the participants’ levels of conspiracist ideation using a novel third-person adaptation of the CMQ (Bruder et al., 2013) (e.g., “They think that there are secret organizations that greatly influence political decisions”; $\alpha = 0.78$, $\bar{r}_{ij} = 0.41$).

The informant-report ratings of the participants’ levels of grandiose narcissism and conspiracist ideation were associated to a respectable degree with the participants’ own ratings of their grandiose narcissism ($r = 0.39$, $p < .001$) and conspiracist ideation ($r = 0.25$, $p < .001$). The informant-report ratings of the participants’ levels of vulnerable narcissism was also significantly associated with the participants’ own ratings of their vulnerable narcissism, but the association was quite small ($r = 0.15$, $p = .026$).

4. Results

Descriptive statistics—including the mean, standard deviation, skew, and kurtosis—for all variables can be found in the [Supplementary Material](#). Gender comparisons and zero-order correlations for all variables can also be found in the [Supplementary Material](#).

Table 1

Zero-order correlations of grandiose narcissism, vulnerable narcissism, and the mediator variables with the five measures of conspiracist ideation.

	BCTI	GCB	CCIS	CMQ	CMQ-I
Narcissism					
NPI	0.16*	0.27*	0.26*	0.23*	0.08
LA	0.17*	0.24*	0.22*	0.21*	0.14*
GE	0.01	0.13*	0.13*	0.09	-0.03
EE	0.18*	0.26*	0.22*	0.23*	0.06
NPI-I	0.08	0.13*	0.10	0.12	0.35*
SD3	0.12*	0.23*	0.26*	0.16*	0.07
PNI	0.14*	0.23*	0.22*	0.30*	-0.06
EXP	0.20*	0.28*	0.25*	0.24*	0.04
SSSE	0.05	0.11*	0.12*	0.20*	-0.07
GF	0.08	0.14*	0.09	0.24*	-0.02
CSE	0.02	0.08	0.10*	0.15*	-0.13*
HS	0.13*	0.16*	0.15*	0.24*	0.03
DEV	0.15*	0.24*	0.25*	0.28*	0.00
ER	0.13*	0.23*	0.23*	0.20*	-0.06
HSNS	0.11*	0.19*	0.14*	0.22*	0.12
HSNS-I	-0.04	-0.08	-0.05	-0.12	0.26*
Mediators					
Delusions	0.37*	0.49*	0.44*	0.41*	0.14*
Paranoia	0.28*	0.39*	0.37*	0.37*	0.10
Uniqueness	0.12*	0.14*	0.09	0.11*	0.19*
Control	0.11*	0.11*	0.13*	0.09	0.11

Note. * $p < .05$. Correlations equal to or greater than 0.30 are bolded. NPI = Narcissistic Personality Inventory; LA = leadership/authority; GE = grandiose exhibitionism; EE = entitlement/exploitativeness; SD3 = narcissism subscale of the Short Dark Triad; PNI = Pathological Narcissism Inventory; EXP = exploitativeness; SSSE = self-sacrificing self-enhancement; GF = grandiose fantasy; CSE = contingent self-esteem; HS = hiding the self; DEV = devaluing; ER = entitlement rage; HSNS = Hypersensitive Narcissism Scale. ‘I’ indicates that a variable is informant-based.

4.1. Zero-order correlations

As shown in [Table 1](#), the majority of the self-report measures of grandiose narcissism and vulnerable narcissism were associated with the four self-report measures of conspiracist ideation (i.e., the BCTI, GCB, CCIS, and CMQ). Likewise, participants who were perceived as being high on grandiose narcissism and vulnerable narcissism were also perceived as being more likely to believe in conspiracy theories.

There was, however, relatively little evidence to suggest that participants who were perceived as being high on grandiose narcissism and vulnerable narcissism actually reported believing in more conspiracy theories. Furthermore, there was little evidence to suggest that participants who reported being high on grandiose narcissism and vulnerable narcissism were perceived as being more likely to believe in conspiracy theories. In other words, self-report grandiose narcissism and vulnerable narcissism showed little association with informant-report conspiracist ideation, and informant-report grandiose narcissism and vulnerable narcissism showed little association with self-report conspiracist ideation. These results may suggest that the source of the association found between self-report narcissism and self-report conspiracist ideation is different than the source of the association between informant-report narcissism and informant-report conspiracist ideation. Steps were taken in the model-building process (discussed in the [Supplementary Material](#)) to account for this potential method effect among the mediation models.

4.2. Mediation analyses

In order to examine whether the four psychological features described above can account for the association of grandiose and vulnerable narcissism with conspiracist ideation, nine structural equation models were fit using the *lavaan* package (Rosseel, 2012) in R (R Core Team, 2020). The first four models were devoted to confirming the factor structure of the data, and the last five models were devoted to testing the mediators. For the sake of brevity, only a discussion of the mediation models is included here. A discussion of the Confirmatory Factor Analysis (CFA) models, as well as a figure depicting the finalized CFA model, are included in the [Supplementary Material](#).

To test whether the four mediators can account for the association of both grandiose narcissism and vulnerable narcissism with conspiracist ideation, four mediation models were fit, one for each of the mediators. A fifth mediation model that added all of the mediators simultaneously was also fit. Although this runs the risk of construct slippage (Lynam, Hoyle, & Newman, 2006; Sleep, Lynam, Hyatt, & Miller, 2017)—such that, when partialling out the effect of the other mediators, it becomes unclear whether a given mediator still reflects the intended construct—adding all of the mediators together was the only way to examine their ability to uniquely account for the association between the two forms of narcissism and conspiracist ideation. Bootstrapping with 10,000 replications was used to estimate the standard errors for all five models.

Before moving onto the results of these models, it is important to highlight that, in cross-sectional studies such as this one, mediation analyses cannot tell us anything about the causal relations among our variables. In the models below, the two forms of narcissism are modelled to have a unidirectional influence on the mediators, and the mediators are modelled to have a unidirectional influence on conspiracist ideation. However, it is quite probable that bidirectional relations exist among all of these variables. As such, the results of the present models should not be taken as evidence of directionality. Instead, the models simply allow us to examine whether the mediators account for some of the association of both grandiose and vulnerable narcissism with conspiracist ideation.

4.2.1. Delusional ideation as a mediator

Delusional ideation partially accounted for the association between grandiose narcissism and conspiracist ideation ([Fig. 1](#)). In other words,

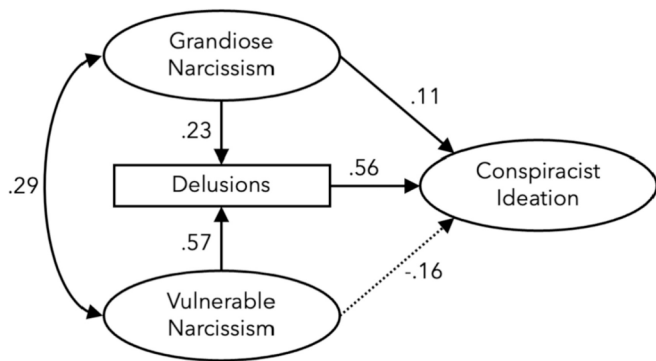


Fig. 1. Delusional ideation as a mediator of the relationship between both grandiose narcissism and vulnerable narcissism and conspiracist ideation, $\chi^2(125, N = 397) = 467.54, p < .001, CFI = 0.90, RMSEA = 0.083, 90\% CI = [0.075, 0.091], SRMR = 0.071$. All coefficients are standardized. For legibility, indicators and error variances are not shown. Dashed paths are not significant at $p < .05$. Dotted paths became significantly negative when the mediator was included.

when taking into account the indirect path through delusional ideation ($\beta = 0.13, 95\% CI [0.07, 0.19], p < .001$), the association between grandiose narcissism and conspiracist ideation ($\beta = 0.24, 95\% CI [0.13, 0.34], p < .001$) remained significantly positive ($\beta = 0.11, 95\% CI [0.00, 0.21], p = .048$). In contrast, delusional ideation fully accounted for the association between vulnerable narcissism and conspiracist ideation, such that—when taking into account the indirect path through delusional ideation ($\beta = 0.32, 95\% CI [0.23, 0.42], p < .001$)—the association between vulnerable narcissism and conspiracist ideation ($\beta = 0.16, 95\% CI [0.04, 0.28], p = .010$) was no longer significantly positive ($\beta = -0.16, 95\% CI [-0.32, -0.01], p = .042$). In fact, when taking into account delusional ideation, vulnerable narcissism was significantly negatively associated with conspiracist ideation. A subsequent comparison of the indirect path for grandiose narcissism and the indirect path for vulnerable narcissism indicated that delusional ideation explained more of the association between vulnerable narcissism and conspiracist ideation than between grandiose narcissism and conspiracist ideation, $\beta = -0.19, 95\% CI [-0.30, -0.08], p < .001$.

4.2.2. Paranoia as a mediator

Similarly, paranoia partially accounted for the association between grandiose narcissism and conspiracist ideation (Fig. 2). When taking into account the indirect path through paranoia ($\beta = 0.04, 95\% CI [0.00, 0.08], p = .046$), the association between grandiose narcissism and

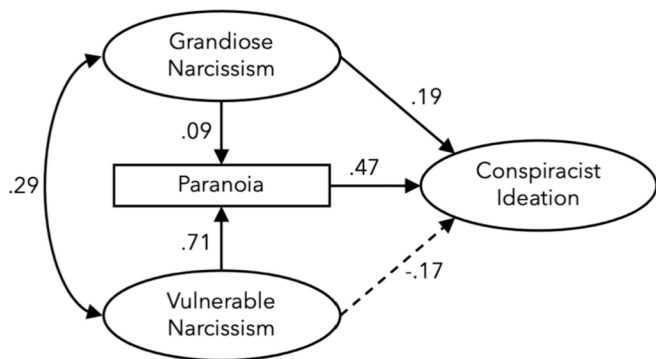


Fig. 2. Paranoia as a mediator of the relationship between both grandiose narcissism and vulnerable narcissism and conspiracist ideation, $\chi^2(125, N = 397) = 461.07, p < .001, CFI = 0.91, RMSEA = 0.082, 90\% CI = [0.074, 0.090], SRMR = 0.073$. All coefficients are standardized. For legibility, indicators and error variances are not shown. Dashed paths are not significant at $p < .05$.

conspiracist ideation ($\beta = 0.24, 95\% CI [0.13, 0.34], p < .001$) remained significant ($\beta = 0.19, 95\% CI [0.08, 0.31], p < .001$). By comparison, paranoia fully accounted for the association between vulnerable narcissism and conspiracist ideation. When taking into account the indirect path through paranoia ($\beta = 0.34, 95\% CI [0.21, 0.47], p < .001$), the association between vulnerable narcissism and conspiracist ideation ($\beta = 0.17, 95\% CI [0.05, 0.29], p = .007$) was no longer significant ($\beta = -0.17, 95\% CI [-0.34, 0.00], p = .055$). A subsequent comparison of the two indirect paths, again, indicated that paranoia explained more of the association between vulnerable narcissism and conspiracist ideation than between grandiose narcissism and conspiracist ideation ($\beta = -0.29, 95\% CI [-0.43, -0.16], p < .001$).

4.2.3. The need for uniqueness as a mediator

The need for uniqueness also only partially accounted for the association between grandiose narcissism and conspiracist ideation (Fig. 3). When taking into account the indirect path through the need for uniqueness ($\beta = 0.06, 95\% CI [0.01, 0.11], p = .025$), the association between grandiose narcissism and conspiracist ideation ($\beta = 0.24, 95\% CI [0.14, 0.35], p < .001$) remained significant ($\beta = 0.18, 95\% CI [0.06, 0.30], p = .003$). It also only partially accounted for the association between vulnerable narcissism and conspiracist ideation, but, in this case, the indirect effect through a need for uniqueness was negative ($\beta = -0.05, 95\% CI [-0.10, -0.01], p = .028$). In other words, the association between vulnerable narcissism and conspiracist ideation ($\beta = 0.15, 95\% CI [0.03, 0.28], p = .013$) became greater ($\beta = 0.21, 95\% CI [0.08, 0.34], p = .001$) when the indirect path was accounted for. Given this fact, it is perhaps unsurprising that the need for uniqueness explained more of the association between grandiose narcissism and conspiracist ideation than between vulnerable narcissism and conspiracist ideation ($\beta = 0.12, 95\% CI [0.02, 0.22], p = .024$).

4.2.4. The desire for control as a mediator

The desire for control did not account for a significant proportion of the association between grandiose narcissism and conspiracist ideation ($\beta = -0.01, 95\% CI [-0.10, 0.09], p = .885$) nor the association between vulnerable narcissism and conspiracist ideation ($\beta = 0.00, 95\% CI [-0.04, 0.05], p = .885$) (Fig. 4). This appears to be because, despite grandiose narcissism ($\beta = 0.67, 95\% CI [0.60, 0.75], p < .001$) and vulnerable narcissism ($\beta = -0.30, 95\% CI [-0.40, -0.20], p < .001$) showing pronounced associations with a desire for control, a desire for control was not associated with conspiracist ideation ($\beta = -0.01, 95\% CI [-0.15, 0.13], p = .885$).

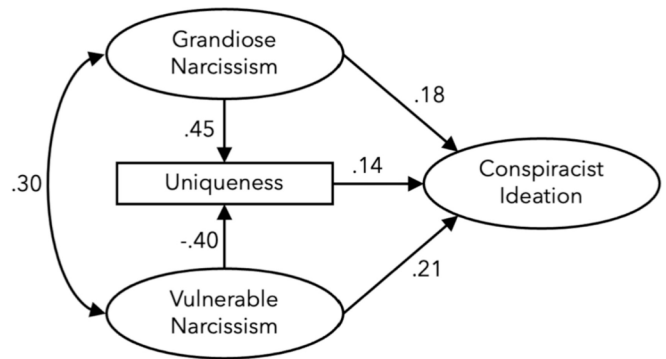


Fig. 3. The desire for uniqueness as a mediator of the relationship between both grandiose narcissism and vulnerable narcissism and conspiracist ideation, $\chi^2(125, N = 397) = 436.17, p < .001, CFI = 0.91, RMSEA = 0.079, 90\% CI = [0.071, 0.087], SRMR = 0.071$. All coefficients are standardized. For legibility, indicators and error variances are not shown. Dashed paths are not significant at $p < .05$.

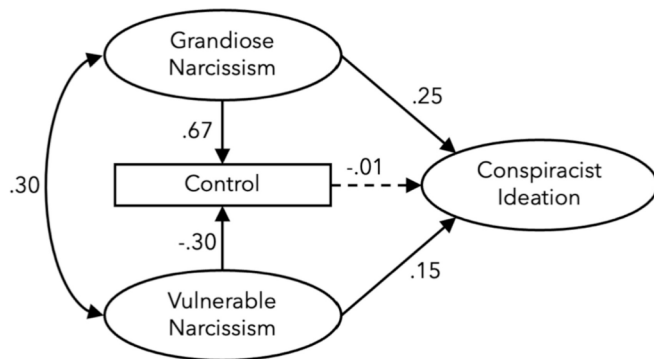


Fig. 4. The desire for control as a mediator of the relationship between both grandiose narcissism and vulnerable narcissism and conspiracist ideation, $\chi^2(125, N = 397) = 475.41, p < .001, CFI = 0.90, RMSEA = 0.084, 90\% CI = [0.076, 0.092], SRMR = 0.072$. All coefficients are standardized. For legibility, indicators and error variances are not shown. Dashed paths are not significant at $p < .05$.

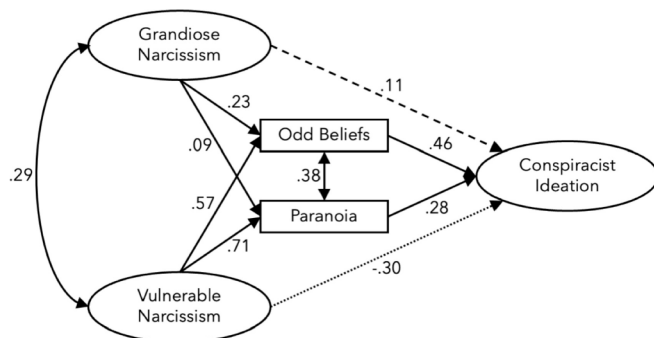


Fig. 5. Delusional ideation, paranoia, the need for uniqueness, and the desire for control entered as simultaneous mediators of the association between both grandiose narcissism and vulnerable narcissism and conspiracist ideation, $\chi^2(167, N = 397) = 597.74, p < .001, CFI = 0.90, RMSEA = 0.081, 90\% CI = [0.074, 0.088], SRMR = 0.068$. All coefficients are standardized. For legibility, indicators, error variances, and non-significant mediators are not shown. Dashed paths are not significant at $p < .05$. Dotted paths became significantly negative when the mediator was included.

4.2.5. Simultaneous mediation

When accounting for the other mediators, delusional ideation explained a significant proportion of the association of both grandiose narcissism ($\beta = 0.11, 95\% CI [0.06, 0.16], p < .001$) and vulnerable narcissism ($\beta = 0.26, 95\% CI [0.16, 0.36], p < .001$) with conspiracist ideation, although it explained more of the association for vulnerable narcissism than for grandiose narcissism ($\beta = -0.15, 95\% CI [-0.25, -0.06], p = .002$) (see Fig. 5). Paranoia also explained a significant proportion of the association between vulnerable narcissism ($\beta = 0.20, 95\% CI [0.07, 0.33], p = .002$) and conspiracist ideation, but not between grandiose narcissism ($\beta = 0.03, 95\% CI [-0.00, 0.05], p = .055$) and conspiracist ideation. When accounting for the other mediators, a need for uniqueness and a desire for control did not account for a significant proportion of the association of grandiose narcissism and vulnerable narcissism with conspiracist ideation.

Altogether, the four mediators fully accounted for the association between both forms of narcissism and conspiracist ideation. When taking into account the indirect path through the mediators, the association between grandiose narcissism and conspiracist ideation ($\beta = 0.24, 95\% CI [0.13, 0.35], p < .001$) became non-significant ($\beta = 0.11, 95\% CI [-0.03, 0.25], p = .136$), and the association between vulnerable narcissism and conspiracist ideation ($\beta = 0.16, 95\% CI [0.04, 0.28], p = .011$) was no longer significantly positive ($\beta = -0.30, 95\% CI [-0.50,$

$-0.11], p = .002$). In fact, the association between vulnerable narcissism and conspiracist ideation became significantly negative, meaning vulnerable narcissism was associated with believing in fewer conspiracy theories when taking into account the four mediators.

5. Discussion

There were two goals of the present study. The first was to provide a high-powered, multimeasure, and multimethod examination of the association of both grandiose narcissism and vulnerable narcissism with conspiracist ideation. The second was to identify psychological features that could help account for these associations. To that end, four theoretically-relevant mediators were included in the present study: (1) delusional ideation, (2) paranoia, (3) the need for uniqueness, and (4) the desire for control.

With respect to the first goal, the present results indicated that grandiose narcissism and vulnerable narcissism are, indeed, both associated with conspiracist ideation. Nearly every single self-report measure of grandiose narcissism and vulnerable narcissism was associated with the four self-report measures of conspiracist ideation. The informant-report measures of grandiose narcissism and vulnerable narcissism were, likewise, associated with the informant-report measure of conspiracist ideation. Perhaps most critically, the grandiose narcissism latent factor—representing the shared variance of the grandiose narcissism measures—and the vulnerable narcissism latent factor—representing the shared variance of the vulnerable narcissism measures—were both associated with the conspiracist ideation latent factor—representing the shared variance of the conspiracist ideation measures. These results add to the modest prior evidence that grandiose narcissism (Cichočka et al., 2016; Kay, 2020, 2021; Malesza, 2020)—and the limited prior evidence that vulnerable narcissism (Jolley & Paterson, 2020; March & Springer, 2019)—are associated with the tendency to believe in conspiracy theories.

Besides allowing for a more detailed picture of the participants' personality traits (Vazire, 2006), the inclusion of informant-report measures of conspiracist ideation also provided the side benefit of allowing us to investigate whether people who are perceived as being high in grandiose narcissism and vulnerable narcissism are also perceived as being more likely to believe in conspiracy theories. As noted above, the present results suggest that people who are rated as being higher in both forms of narcissism are also rated as being more likely to believe in conspiracy theories. To the author's knowledge, this is the first study to show that perceived characteristics of an individual can influence whether a person is likely to be labelled a *conspiracy theorist*, an important consideration given recent research indicating that these beliefs are highly stigmatized (Lantian et al., 2018).

Turning to the second goal of the present study, four mediators were tested for their ability to account for the relationship of grandiose narcissism and vulnerable narcissism with conspiracist ideation. It was expected that delusional ideation would contribute to conspiracist ideation among those high in both grandiose narcissism and vulnerable narcissism; paranoia would contribute to conspiracist ideation primarily among those high in vulnerable narcissism; and the need for uniqueness and the desire for control would contribute to conspiracist ideation primarily among those high in grandiose narcissism.

As expected—and consistent with previous research on grandiose narcissism (Kay, 2021)—delusional ideation explained some of the association between both forms of narcissism and conspiracist ideation. This was the case both when the mediator was tested alone and when accounting for the other mediators. As such, it appears that those high in grandiose narcissism and vulnerable narcissism believe in conspiracy theories, in part, because they are prone to having odd and unusual beliefs (Gentile et al., 2013; Miller et al., 2013; Miller et al., 2018; Thomas et al., 2012; Wright et al., 2013; but see also Grigoras & Wille, 2017). If, for example, a person high in grandiose or vulnerable narcissism believes that advertisements in magazines or on TV were

written especially for them, it would likely not be a stretch for them to also believe that a secret organization planted those messages there.

Of additional interest, when taking into account delusional ideation (as well as when taking into account all of the mediators simultaneously), vulnerable narcissism was actually negatively associated with conspiracist ideation. This suggests that, if it were not for their tendency to suffer delusions, vulnerable narcissists would actually be less likely to believe in conspiracy theories than their non-narcissistic counterparts. This could be because whatever is left over of vulnerable narcissism after accounting for odd beliefs is somehow protective against the development of conspiracist beliefs, although it is yet unclear what that psychological feature might be.

When not accounting for the other mediators, paranoia explained part of the association between grandiose narcissism and conspiracist ideation and the entire association between vulnerable narcissism and conspiracist ideation. When taking into account the other mediators, paranoia remained a significant mediator of the association between vulnerable narcissism and conspiracist ideation but not of the association between grandiose narcissism and conspiracist ideation. Taken together, these results may suggest that there is something unique about paranoia that links vulnerable narcissism—but not grandiose narcissism—to conspiracist ideation. One possibility is that paranoia captures a specific type of delusion that is held predominantly by vulnerable narcissists. For example, people scoring high in vulnerable narcissism may be more likely to believe in conspiracy theories because they suffer from delusions of persecution and, as a result, are more likely to believe that there is a confederacy of malefactors plotting their downfall.

By comparison, a need for uniqueness explained some of the association between grandiose narcissism and conspiracist ideation. As such, part of the reason that those with high levels of grandiose narcissism believe in conspiracy theories may be because conspiracy theories feed their need to feel unique (Back et al., 2013; de Bellis, Sprott, Herrmann, Bierhoff, and Rohmann, 2016; Emmons, 1984; Lee et al., 2013; Lee & Seidle, 2012; Ohmann & Burgmer, 2016), perhaps by making them feel like they are part of an unusually intelligent, perceptive, or courageous group of people. Nevertheless, it should be noted that the desire to feel unique only explained the association between grandiose narcissism and conspiracist ideation when modelled on its own. When the other mediators were included in the model, the indirect effect of uniqueness was not significant. Part of this could be due to the fact that the need for uniqueness overlapped to a substantial degree with a desire for control ($r = 0.52$). Accounting for the desire for control may have, therefore, undercut some of the explanatory power of the need for uniqueness. That said, the need for uniqueness showed a small association with conspiracist ideation even before taking the other mediators into account ($\beta = 0.14$; $r = 0.09$ – 0.14). These findings would suggest that a need for uniqueness does explain some of the association between grandiose narcissism and conspiracist ideation but that there are potentially more meaningful psychological features to consider (e.g., delusional ideation).

An unexpected finding was that, when accounting for the indirect effect of the desire for uniqueness, the association between vulnerable narcissism and conspiracist ideation actually increased—a phenomenon known as *inconsistent mediation* (MacKinnon, Krull, & Lockwood, 2000). Put simply, vulnerable narcissism was positively associated with conspiracist ideation, but it was also negatively associated with a desire for uniqueness, which was, itself, positively associated with conspiracist ideation. As a result, the desire for uniqueness acted as a suppressor on the relationship between vulnerable narcissism and conspiracist ideation until it was explicitly accounted for within the model.

Finally, and counter to expectations, a desire for control did not mediate the association between grandiose narcissism and conspiracist ideation (nor did it mediate the association between vulnerable narcissism and conspiracist ideation). This result seems to stem from an exceptionally small association between the desire for control and conspiracist ideation ($\beta = -0.01$; $r = 0.09$ – 0.11). Given the strong

theoretical support for the link between the desire for control and conspiracist ideation (see Douglas et al., 2017), it would be inappropriate to argue that this single finding calls into question the role of control in the development of conspiracist beliefs. That said, it does align with the results of a recent meta-analysis showing that the average effect size between a lack of control and conspiracist ideation is quite small ($d = -0.05$, Stojanov & Halberstadt, 2020).

Collectively, it appears that grandiose narcissism and vulnerable narcissism are linked to conspiracist ideation, not only for reasons that are common to both constructs (i.e., delusional ideation), but also for reasons that are unique to each construct (i.e., paranoia and, potentially, the need for uniqueness). In other words, the present results are consistent with the idea that both forms of narcissism (a) share a common core (Miller et al., 2017; Miller et al., 2016) and (b) are separable, each with its own distinct nomological network (Miller et al., 2011).

Although such an effort is quite ambitious, the present results could also be used to inform the development of tailored interventions for addressing conspiracist ideation among people with particular personality types. For instance, the findings presented here would indicate that interventions designed to reduce delusional ideation could reduce conspiracist ideation among those scoring high in grandiose narcissism and vulnerable narcissism. On the other hand, interventions directed specifically towards reducing paranoia would be better suited for those scoring high in vulnerable narcissism. As noted in the introduction, conspiracist ideation is associated with a number of harmful beliefs and behaviours (e.g., vaccine apprehension, Jolley & Douglas, 2014a). The development of effective interventions to curb these beliefs is, therefore, imperative.

6. Limitations and future directions

The present study does, however, have a number of limitations that should be noted. First, the study relied on a sample of undergraduate students from a Western, educated, industrialized, rich, and democratic society (WEIRD, Henrich, Heine, & Norenzayan, 2010). It is yet unclear whether the present results would generalize to non-WEIRD samples. Second, mediation analysis was used in the present study to test whether the four mediators could account for the association between the two forms of narcissism and conspiracist ideation. The present results, however, should not be taken to mean that the two forms of narcissism necessarily cause the four mediators and that the four mediators, in turn, cause conspiracist ideation. There is, in fact, good evidence that the association between conspiracy theories and some of the mediators tested here are, at the very least, bidirectional (e.g., the desire for control; Jolley & Douglas, 2014a, 2014b). Manipulations could be used in future work to further probe the directionality of these relationships. Third, multiple measures were used to assess grandiose narcissism, vulnerable narcissism, and conspiracist ideation, but only one measure was used to assess each of the mediators. As such, it is possible that the mediation effects identified here are partly attributable to the specific scales used. Future work could employ multiple measures of the mediators to rule out such measure-specific effects. Finally, the four mediators examined in the present study were chosen based on their theoretical relevance and to align with prior work on the relationship between grandiose narcissism and conspiracist ideation (Kay, 2021). Nevertheless, it is likely that other psychological features (e.g., overconfidence; an intolerance of uncertainty) would also be able to account for some of the relationship between the two forms of narcissism and the tendency to believe in conspiracy theories. Although the present findings provide an important first step, future work should consider the ability for other yet unexamined mediators to account for the relationship of both grandiose and vulnerable narcissism with conspiracist ideation.

7. Conclusion

The present findings indicate that people high in grandiose narcissism and vulnerable narcissism believe in conspiracy theories for at least one shared reason: They are prone to delusions. The present study also provides some evidence that conspiracist beliefs arise among those high in grandiose narcissism and vulnerable narcissism for reasons that are unique to each construct. Namely, grandiose narcissism is linked to conspiracist ideation because of a need for uniqueness, while vulnerable narcissism is linked to conspiracist ideation because of paranoia. Taken together, these results contribute to our understanding of the nomological networks of grandiose narcissism and vulnerable narcissism and may, potentially, provide a starting point for developing interventions to combat these problematic beliefs.

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CRediT authorship contribution statement

Cameron S. Kay: Conceptualization, Methodology, Formal analysis, Investigation, Writing - original draft, Writing - review & editing, Visualization, Project administration.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jrp.2021.104128>.

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